

JPRS 77805

10 April 1981

# **East Europe Report**

**ECONOMIC AND INDUSTRIAL AFFAIRS**

**No. 2115**

**FBIS**

**FOREIGN BROADCAST INFORMATION SERVICE**

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [ ] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

10 April 1981

# EAST EUROPE REPORT

## ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2115

### CONTENTS

#### ALBANIA

- Need for Scientific Development of Agriculture Stressed  
(Hulusi Hako, Myfit Balani; RRUGA E PARTISE, Dec 80) .... 1
- Role of Biological Sciences in Economic Development  
(Teki Tartari; RRUGA E PARTISE, Dec 80) ..... 11

#### CZECHOSLOVAKIA

- CSR, SSR Plan Fulfillment Results for 1980 Published  
(PRAVDA, 27 Jan 81) ..... 18
- Directive on Fuel Economy Efficiency in Transportation Studied  
(Josef Dykast; HOSPODARSKE NOVINY, 4 Jan 81) ..... 31

#### POLAND

- Crop, Livestock Production Figures Listed  
(ZYCIE GOSPODARCZE, 12 Oct 80) ..... 45

#### ROMANIA

- Decree on Relations Between Agricultural Machine Stations, Units  
(BULETINUL OFICIAL, 26 Dec 80) ..... 47
- Decree on Industrialization of Products of Farmers  
(BULETINUL OFICIAL, 26 Dec 80) ..... 56

#### YUGOSLAVIA

- Law on Permanent Funds To Finance Underdeveloped Regions, 1981-85  
(SLUZHBI LIST SFRJ, 31 Dec 80) ..... 59
- Law on Supplemental Funds for Republics, Provinces, 1981-85  
(SLUZHBI LIST SFRJ, 31 Dec 80) ..... 65

|  |    |
|--|----|
| First Joint Program for Railroads, Economic Units<br>(Igor Presern; DELO, 27 Jan 81) ..... | 68 |
| Daily Newspaper Circulation Compared for 1979, 1980<br>(NASA STAMPA, Feb 81) .....         | 71 |

## NEED FOR SCIENTIFIC DEVELOPMENT OF AGRICULTURE STRESSED

Tirana RRUGA E PARTISE in Albanian Dec 80 pp 30-40

[Article by Hulusi Hako and Myfit Balani: "The Development of Agriculture on Scientific Bases Is Carried Out Through a Struggle Against Empirical Concepts and Practices"]

[Text] The development of our agriculture during the years of people's power has always relied on the achievements of science, but of course, during each period this has been done to the extent allowed by the material-technical conditions and the technical-professional level of the specialists, of the cadres and of the agricultural workers, thus also proving in the case of agricultural sciences the correctness of the thought of Comrade Enver Hoxha that "Science, or scientific thought, cannot nor should it be separated from the social framework in which it evolves" (Enver Hoxha, "The country's progress is inseparable from the development of science and of technology," pamphlet p 6).

The agriculture of our country has now reached a new phase of development and it is assuming new and greater tasks. The transformations made during the years of people's power in the field of land reclamation, irrigation, mechanization, chemicalization, electrification, the creation of a great army of cadres, specialists and skilled workers, the establishment on healthier labor methods at research stations and of research institutions, the amassing of a rich experience in all the branches of production. These and quite a few other achievements have created conditions and a healthy basis for the further intensification and modernization of agricultural production, to develop and also strengthen the scientific research. We see these possibilities concretized in that reality which is expressed by utilization of soil on the basis of the agropedological and agrochemical studies, in the creation of livestock complexes and industrial centers for poultry, cattle and hog raising, in the implementation of expanded production of a modern agricultural and biological technology, in the domestic production of selected wheat seeds, in the generalization of some types of corn crops of the country and in the production of original hybrids, in the production of the hybrid tobacco seed, of the "Fieri" type cotton, of early potatoes and of some types of vegetables, in the creation of hybrid herds of cows and sheep, in the production of cross-breeds, of veterinary medicine, etc.

All these results of the heretofore research-scientific work are being assimilated by the mass of agricultural workers and are being ever better implemented

to expand agricultural and livestock production. This fundamental factor for the advancement of production is taking place in our country in a concrete, progressive social, ideological, economic and political ground. But reinforcement in this field constitutes a permanent task which is realized in the struggle against conservative and empirical concepts, against intellectualism, scholasticism, which limit the broad participation of working masses in the research activity and in scientific experimentation and detach scientific activity from those concrete problems which are presented for solution to our agricultural production. The struggle against these regressive concepts and practices, which clash with the scientific concepts and practices now assumes special importance.

For the sector of agriculture, too, as for every other sector, the party laid down during the Eighth Plenum of its Central Committee a series of concrete areas on which scientific research must concentrate, strengthen and improve. The further utilization of coastal zones and of other sandy zones, their inclusion in the system of land reclamation, the utilization of river beds through embankments and other means, accelerated work to improve salty and acid soils, the regulation of underground water use, hence, the protection, increase and enrichment of the soil, as well as the increase of the genetic capacities of seeds and of livestock breeds, these and other important problems cannot be fully solved if it is not activized through scientific research, study and implementation by the broad mass of cadres, of specialists, and agricultural workers. This cannot be done if one does not know and overcome the manifestations, the empirical concepts and practices, the routine work, dilentantism and scholasticism which are observed in some workers and cadres of the agricultural units and of scientific research institutions.

1. The struggle against empirical concepts and practices must be a permanent and organized one, because despite the great work which has been done so far against them and despite the many results, they are nevertheless encountered and hinder the advancement of science and of our agricultural production.

It is up to the power and economic organs, the cadres and specialists of agricultural units, under the leadership of the basic party organizations to know and study the negative effects of the empirical methods which are practiced in their sectors and special work processes. By eliminating the use of these methods from specific activities, the people become skilled and work is organized to carry out on scientific bases the terracing of lands, the cultivation of bread grains and industrial crops, vegetables and fruit trees, the better upkeep of livestock particularly cattle, sheep and hogs and upkeep of pastures and forests. To criticize and to avoid empirical concepts and practices, it is necessary to clarify where their negative effects lie, where their roots are and what feeds them. Why does the struggle against them become more necessary under the present conditions of socialist construction, how widespread are the empirical concepts and practices today and how must they be combated.

Life itself teaches us that empiricism is protected by the force of tradition, that it is nourished by fear, ignorance and insecurity, supported by the feeling of satisfaction with little, laziness and indifference. This shows that the territory of the struggle against it is quite wide, both in theoretical and

practical terms. The elimination of the sources which feed and support empiricism, as shown by our entire development also in the sector of agriculture, is achieved through an all-round, varied educational work, through organization and mobilization, which fills one with faith and optimism for the new, which fights the feeling of complacency or of satisfaction with little, and which brings one closer to the problems and objectives which it is aimed to attain. One of the objectives of the work of the party is to create the conviction among workers, specialists and agricultural cadres that the deepening in scientific research and the implementation of its data is required by the times, and required by the attainment of the high objectives which are being laid down for the Seventh Five-Year Plan also in the field of agriculture, that this task is realized by a willpower, love and passion for work, which has not been lacking in our workers, specialists and vanguard cadres.

In order to have as many solid successes as possible in the struggle to narrow down and gradually liquidate empiric concepts and practices, it is also necessary to treat them from the philosophical point of view, because, as it is known, empiricism represents a doctrine which overrates the role of the observation and underrates the active role of abstraction, thinking, science and theory in general, in the attainment of knowledge. In contrast Marxist philosophy places practice on the basis of the theory of knowledge, reasons about the necessity of establishing a unity between shallow experience, constituting the first step of knowledge, and thinking, rational knowledge, which is also considered the second step of knowledge.

Our party has carried out and carries out a great work to implant in the workers the Marxist-Leninist philosophical world outlook, therefore, in the field of knowledge, too, as a rule, in our new man the shallow impressions and thinking act ever more in total unity. Nevertheless, there are also those who fail to get the proper education by underevaluating study and by not studying continuously, by not familiarizing themselves with the latest science and technology. They do not assess sufficiently and properly rational knowledge, theory, science, and willy-nilly, also uphold philosophical remnants of empiricism and thus find it difficult to understand that this is a narrow world outlook, shallow and one-sided, which cannot respond to the new qualitative demands with which we are confronted today. And, like everywhere else, such people who hold empirical ways of thinking and acting are to be found in agriculture too.

Socialism is the order of the very high scientific organization of the economy, through the ever more conscious participation of the working masses, and hence it cannot reconcile itself with the empirical concepts and practices. This problem also remains acute when it is analyzed within the framework of agriculture. The continuous intensification of agricultural production, the utilization of seeds and new breeds with ever higher productive capacities which have new qualitative cultivation and maintenance demands cannot be realized through empirical concepts and practices which some cadres, cooperativists or workers of agricultural enterprises continue to practice.

Let us deal with a fact. An increase in livestock productivity for example, greatly depends, among other things, on securing a necessary quantity and quality fodder base, which is entirely based on developing fodder crops and increased

yields. But it is a fact that in the cultivation of these crops quite a few weaknesses continue to exist, among others, they are also undervalued, because there are agricultural cadres and workers who continue to be burdened by old practices of securing a fodder base for livestock as to the amount which was secured and the way it was secured, entirely from natural grazing lands. These types of agricultural cadres and workers, even if they do not admit it openly, are not capable of understanding how the "bread soils" can be fed with fodder to provide them with the same services required by the fields sown with wheat. These people fail to comprehend that to obtain 70-80 quintals of fodder units per hectare the same care must be shown for them which is required for those fields sown with wheat from which they hope to obtain 40 quintals of wheat per hectare.

The struggle against empirical concepts and practices becomes ever more necessary to solve the contradiction which has been created in some agricultural units between the disharmony of the very advanced socialist methods of production and the achievements of science, on the one hand, and the still low level methods used, on the other, something which is clearly reflected in the relatively low yields obtained in some farm and dairy products as a result of the improper and insufficient implementation of scientific progress and requirements.

Our country is the only one which is successfully building a true socialist society, under special historic conditions, surrounded by the capitalist-revisionist world, and without receiving any assistance from abroad. The fulfilling of the great tasks under these conditions under consideration for the agricultural sector in the Seventh Five-Year Draft Plan (1981-1985) dictates the necessity for a qualitative turn-about in the entire activity of the workers. This is something which will be achieved, among other things, through the fulfillment of every work process, through the cultivation of every crop and the raising of every type of farm animal on the basis of healthy scientific criteria.

2. To establish production on scientific bases means to fulfill on schedule all the biological demands of growth, development and of production for crops and farm animals, and according to the required quantity and quality.

It is well known that the cultivation of crops, the raising of domestic animals and obtaining high yields from them cannot be done automatically. They are carried out by man through his conscious activity. Our farmer loves his work. Through patience he tills the soil, plants and raises the crops, raises livestock and produces material goods. But this work yields high results when it is carried out not only on the basis of tradition, but when it relies strongly on scientific progress. Inherited experience is often limited and empiric, and as such, it does not fulfill the requirements to expand socialist production which relies continuously on the advances of science and technology, and on scientific generalization of experience which is continuously collected and enriched in the process of work for the achievement of ever greater objectives.

If some agricultural units and districts are closing the Sixth Five-Year Plan with deficits in the production of bread grains, and in other farm and livestock production, this fact must stimulate the cadres, specialists and workers of these

units and districts to see what has hindered them from obtaining the expected yields. If the problem is analyzed in detail, then the true causes can be found, those empirical concepts and practices which have a negative impact on work and production will be recognized and fought.

Even if simply from empirical experience the fact is known that, for example, soil constitutes the fundamental means of work and production in agriculture. But how is it treated? Is it treated as a complicated biological organism with all its own demands and characteristics? Because not only various types of soils, but also soils of the same type are distinguished by structural and physico-chemical characteristics, hence they also require a differentiated, scientifically based, treatment.

Without knowing these characteristics and a series of other factors about the soil, gained through pedological and agrochemical studies, and through the comprehensive knowledge of the demands of crops put on the soil they are planted in, one cannot talk about scientific soil treatment or about the scientific cultivation of crops, two basic factors for attaining high yields. However, in general practice we encounter quite a few cases when though the methods of soil fertilization and irrigation are known, "short-cuts" are nevertheless made. The same norms for chemical fertilizers or irrigation are used, which negatively affects some soil categories and some types of crops.

Empirical practices continue to occur especially in connection with the time of sowing seed. Some negative facts with regard to the time of tilling and planting of crops observed in some units and districts prove that the problematic belief that "there is time to plant" and the empiric practice to plant "when the soil becomes warm" still continues. Proof of this is the delay in working [the soil] and sowing and the disregard for draining the land, especially for spring planting.

It is the task of our scientific specialists and workers to enlighten the mass of the agricultural workers that the old empirical practice of planting "when the soil becomes warm," or as they used to think in the agricultural cooperative of Zall-Bastari in Tirana "when the snow is gone in the Malin me Gropa," is mistaken and has negative consequences for production. The scientific experiments carried out a few years ago in the agricultural enterprise of Levani in Fier have shown that one should not wait "until the soil itself comes" for tilling, but that this "arrival" can and must be accelerated with surface preparation and the construction of drainage networks. The effect of this network is determined by its speed and depth, requirements which are related to the condition of free water in the soil. The experience of the Levani agricultural enterprise has proven that when these ditches are not opened on schedule, to the required depth and width, and when the "urith" type is not drained, the wheat yield drops in these areas from 30 to 18-19 quintals per hectare.

Preparing the soils on time for planting cannot be based on empirical practices because early planting of new seeds, such as those of corn, cotton, sunflower, potato and others which are used today by our agricultural units, constitutes one of the basic factors for attaining high yields. Under these conditions, the struggle to plant during the recommended period and on a well prepared soil,

constitutes a concrete battlefield against empirical concepts and practices.

It is the duty of the party organs and basic district and local organizations to point out that the world outlook of empiricism is metaphysical and regressive. Having known a specific condition of things, or having assimilated a specific type of action and through it attained a certain level of production, one becomes complacent with the created situation and refuses to find new ways to change the situation to increase productive capacities of the soil. This inflexible position is maintained even when science and practice prove the opposite, being complacent with the given situation, even if it is contradictory. In the past, for example, empiricism attributed the increase in soil productivity to the use of organic fertilizer and refused the use of chemical fertilizer, which according to the old idea "burns the crop," and "ruins the soil." Now, because the positive effects of chemical fertilizer cannot be contested, organic fertilizers are not used, even though this type of fertilizer creates the structure of soil, and provides it with humus so necessary for the development of micro-organisms, and so forth.

The nature of the development of the crop is such that it does allow man much leeway in the nonfulfillment of its needs and requirements. In general the same also holds for animals which no matter how they make up for some of the shortcomings of the human beings by consuming their bodily reserves to maintain production level. It should not be allowed to go so far. This type of "forceful" production is antibiologic and antieconomic. It leads to the destruction of the animal.

The livestock farmer or the empiric cadre is not capable of understanding this biological metamorphosis which occurs in the organism of the animal because he has a very simple understanding of the animal organism. For example, according to him, when a cow does not receive the necessary feed it reduces its milk supply, and by simply improving the feed for the cow it can again increase its production of milk. Of course there is a healthy truth in this. But empiricism absolutizes this factor and relates everything to it. It does not understand, for example, what scientific observations have proven, that during the waverings of the feeding regimen the organism of the animal experiences shocks and that some of these repeated shocks can lead up to its degeneration, in fact to the degree that even every improvement of feed cannot reestablish the condition for the increase of the production of milk. The damage of these waverings in the feeding of animals is greater especially among the breed animals, such as the cows of the laramane breed, which have a more or less delicate organism. They require not only a regular supply, but also good quality mixed fodder, with a high nutritional value, suited to their period of growth or pregnancy, of high productivity or of the dry period. Some agricultural units disregard these factors and feed the cows "with that which they happen to have." As a result, their production is very irregular and, generally, lower yields are produced as compared, for example, to the cow herds of the Kazma agricultural enterprise, where last year they obtained 4,000 liters of milk per fodder-fed cow.

The feeding of farm animals represents a science in development, which must be known and carried out not only by the biologists, but also by those who occupy themselves directly with the raising and care of domestic animals. In practice, we still encounter units which show quite a few shortcomings and weaknesses in this field. These must be recognized and overcome. The increased production of meat, milk, eggs and of other animal products and reduced costs requires feeding of animals be carried out on solid scientific bases. With solid scientific bases, today we not only mean the fulfillment of their fodder needs, but also the correct ratio of various types of fodder, to secure a protein balance, and fulfill the mineral needs and microelements. Empiricism finds it difficult to understand these requirements, hence it also does not care when they are not fulfilled.

3. The struggle against empirical concepts and practices, to place agricultural production on a broader scientific basis requires broad educational and formal training, but also resolute work to raise the professional capabilities of specialists, cadres and agricultural workers. This demand is connected with the attainment of the concrete objectives which the party has assigned to our agriculture.

The Eighth Plenum of the party Central Committee also stressed the improvement of the work to train cadres and workers which constitutes an essential demand for the present and the future, in every sector, as well as agriculture. This task is dictated by the uninterrupted and intensive development of agriculture with the rapid development of agricultural sciences necessary to further strengthen the technical-scientific revolution in this branch of the economy too. This becomes even more necessary if we consider that in some agricultural sectors a relative disharmony has been created between agronomic and biological demands of high production crops cultivated and animals raised, and the level of workers' qualification.

This disharmony must be overcome everywhere and at whatever level that it occurs. To attain the high objectives projected for the new five-year plan period, such as a yield of 40-45 quintals of wheat and 60-70 quintals of corn per hectare from the plains area and 25-30 quintals of wheat and 30-40 quintals of corn per hectare from the hilly and mountainous zones, requires specialized labor everywhere and from all. Actually, these yields have already been achieved by many productive units and it is a fact that this has been made possible where the necessary and continuous qualification of the workers, cadres and specialists have been attained, and where all manage, observe, analyze and work on scientific bases. Except the situation is not like this in every agricultural unit. What kind of phenomena are observed?

First, some cadres of agriculture, with especially long work experience of long-term agricultural economic management or its special sectors, think that they know and are masters of all the information, demands and agrotechnical conditions, the laws of the biological laws of crop and animal development, the secrets of management and the organization of production. Thus creative character of agricultural activity is denied. The need to consult specialists and books is not felt, and as a result the problems are not always correctly judged nor are the workers instructed properly. Guidance and scientific knowledge is not provided

so that they can be conscious of the work processes which they carry out and which they should carry out through proper technical criteria. This is a serious defect. Comrade Enver Hoxha, speaking at the Eighth Party Plenum of the Central Committee about the danger of undervaluing science and technology, pointed out that "There are managers who think that they know everything, therefore they ignore the thinking of the specialists." "You may be a manager," Comrade Enver Hoxha continued, "but this does not mean that you know everything, in fact you do not need to know it all but the manager must be obligated to learn and to listen to those who know" (Enver Hoxha, "The progress of the country is inseparable from the development of science and technology," pamphlet, p 38).

The undervaluation of knowledge and its continuous impoverishment leads to viewing things in a superficial way. By pursuing daily things, often of second-hand importance, scientific analysis cannot be made of the achievements and of weaknesses nor the drawing of scientific conclusions from them how to move ahead by overcoming the existing weaknesses and shortcomings. Since all cadres do not possess the necessary professional level, including even some large districts such as Lushnje, Fier etc., chairmen of agricultural collectives are found with 8 years of schooling, a part of these cadres continue to occupy themselves with managing general tasks and everything which they encounter. They thus displace other qualified links and persons who should and could carry out these tasks better.

When the necessary qualification of all cadres and workers has been realized, the strong need arises to give priority to the improvement of the technical-scientific level of the responsible workers in the sectors, the brigadiers and of the responsible group persons who are in fact important links in the organization and in the management of agricultural production, cadres who communicate directly with the workers, who control and analyze their work. Under the present conditions, when we have a large number of middle cadres, and we have set up many agricultural technical schools with and without work interruption, it is impermissible for these tasks to be left to unqualified people with insufficient educational and technical training.

Being at the head of the brigade, and/or the group, a middle cadre can create conditions to expand and deepen scientific experimentation and of the scientific research at brigade and group levels. By taking into consideration the basic soil variations, "inch for inch," as the people say, as well as the very differentiated microclimate, scientific research at the sector and brigade level assumes special importance. It creates conditions to sow that which is more suitable and which gives high yields in various types of soil.

Second, although agricultural and livestock specialists, such as the agronomists, zootechnicians, agrarian economists, forest engineers and so forth, constitute the most qualified category, it would be a mistake to think that no manifestations of empiricism can be found among them. Those factors which create and hold empirical concepts and practices stressed above, such as the force of tradition, the fear of the unknown, insecurity, the feeling of satisfaction with little, laziness, indifference, can also influence the specialists. The damage which is caused in this case to the economy is greater because empiricism is

clothed with the "scientific dress," and is preserved and defended with "scientific" slogans.

To place production on scientific bases, the Eighth Party Plenum of the Central Committee also laid down concrete tasks for the specialists of production. "The party expects and demands from them that in cooperation with the working collectives, improvements and progressive changes are made. Otherwise their work will not have the desired result" (Enver Hoxha, "The country's progress is inseparable from the development of science and technology," pamphlet, p 38).

We now have quite a few dedicated specialists in agriculture, who greatly contribute in the scientific development of agricultural production. But the fact must also be admitted that some weaknesses which are observed and which affect the yield, cost and the quality of production also attest to the inadequate and unqualified work of the specialists. At the base and in districts, specialists are encountered who seldom open a book, who themselves do not carry out a scientific research and who manage "with what they remember" and according to what they see. These types of specialists who are not too demanding toward themselves, cannot be expected to have a positive effect on others.

Third, more work is especially required to qualify the mass of agricultural workers. The completion by all of the 8 years of school, the attendance by many workers of the various specialized courses as well as by many others of the evening agricultural technical schools have helped to raise the general educational and technological level of the agricultural workers. These people are also enriching their knowledge in the great school of life, and are ever better fulfilling the requirements of our socialist agriculture. Nevertheless for most agricultural workers the concept is encountered that "in agriculture there is no need for profound knowledge. There is no need for continuous study because the same processes are repeated: sowing and reaping." This principle is also sometimes encountered among youths, even some students, hence it must be evaluated and fought.

There are many ways to improve agricultural workers. By increasing the number of agricultural schools, especially evening [part-time] ones and improving the level of educational and development work in these schools, eliminating the weaknesses observed in them, especially of irregular school attendance and poor motivation for mastering the subject matter, constitute the broadest and most effective means to master science and to implement it to expand production.

Improving and modernizing the schools scientific experimentation with various crops and animals, and by using the most distinguished economic units as models constitute very important ways to raise the professional level of agricultural workers and to defeat empiricism. The expansion of these schools and the continuous qualification of the workers constitutes an important aspect for implementing the full task of party policy in agriculture.

But if the modern scientific schools are organized on the district level, the empirical concepts and practices are more concretely fought at the brigade and unit levels because they are directly confronted with high productivity plots

and herds. Practice teaches us that when these experimental plots and herds are organized for those types of crops and animals which have low economic yields, when scientific methods are used and when these plots and herds are tended and controlled by central or district agricultural scientific research institutions, their effect in combating empirical concepts and practices is great. They constitute concrete visible and viable examples as to how and how much production can increase when it relies on scientific concepts and practices.

Many facts in life convince us that doing away with empirical concepts and practices can be realized with comprehensive education and improved training.

The horizons which have opened and the enthusiasm created the directives of the Eighth Party Plenum and the address delivered at the plenum by Comrade Enver Hoxha, will undoubtedly also motivate scientific thinking in agricultural production and in the struggle against empirical concepts and practices from which perhaps more than any other branch of material production, agricultural production has suffered most.

CSO: 2100

## ROLE OF BIOLOGICAL SCIENCES IN ECONOMIC DEVELOPMENT

Tirana RRUGA E PARTISE in Albanian Dec 80 pp 23-29

[Article by Teki Tartari: "The Development of Biological Sciences Must Comply to the Fulfilment of the Tasks of the Present and Long-Range Level of Economic Development"]

[Text] The works of the Eighth Plenum of the party Central Committee for the development of science and technology, and the speech of Comrade Enver Hoxha delivered at this plenum, mark a phase of historic importance for the progress and for the more rapid development of the various sciences in our country.

The period since the plenum has been used by the workers in scientific institutions which do research in various fields of the biology to carry out the most profound analysis possible in the light of the party directives, to draw conclusions and take the necessary measures for further improving the work of these institutions. In the various branches of the biological sciences, there was analyzed especially the still unsatisfactory condition of the theoretical and scientific level of research, the fragmentary character of the studies, the failure to carry out scientific recommendations, the still inadequate training of specialists in biological studies, as well as the various deficiencies in the material base of research and of teaching. On the basis of these analyses, the plans for study and research work are being reexamined for the coming five-year plan, and new guidelines for scientific work are being established, objectives are being accelerated in the direction of the quality of research work and of its effectiveness, to unite it more closely with the tasks of the economy and meet the deadlines.

It is a fact that today, biological sciences occupy an important place in the system of natural sciences, to a very broad extent, starting with the support and scientific explanation applied to the various processes of work in agriculture and livestock production and up to the execution of molecular mechanisms and the application of methodics for the creation of varieties, breeds and hybrids of agricultural crops and animals, in the establishment of new therapies to protect the health of man and in the penetration of the secrets of life, in the study of the biological relationships of living beings and in the protection of a clean and healthy environment.

In addition to the broad variety of problems which it explains and solves in practice, a present-day characteristic of biological science is its cooperation with many other branches of sciences, such as mathematics; physics, chemistry, which help to a considerable degree, to make biology more fruitful and more concrete, to make the greatest possible contribution to the development of the economy.

Some results of the development of biological sciences in our country and their implementation in various branches of agricultural economy, of health and others, especially in the direction of the creation of types and of hybrids, of the differentiation of agricultural plants and animal breeds, of soil amelioration and increasing its yields, of the protection of the population, of plants and of animals from diseases, of the protection of environment, and so forth are known. There have also been results in the process of teaching, in the improvement and enrichment of teaching programs and plans, in the relative up-dating of texts with the advancements made by the science of biology, and so forth.

But the Eighth Plenum of the party Central Committee also stressed the shortcomings and some relative backwardness which exists in this field, as well as the very great tasks which face us. "As far as the biological sciences is concerned," it was stressed at this plenum, "it is necessary to overcome the phase of the work of simple description and selection, so as to move on to a phase of studies and experimentations of modern biology, for the creation of varieties, of hybrids and of new breeds with a high resistance and productivity."

The execution and concretization of this very important task requires, in the first place, a clear and profound concept of that which must be attained, a qualitative improvement of research work in the field of biology, the further strengthening of scientific work in those branches in which we have started work and in which we have achieved results, as well as the formulation of the new scientific fields and directions which are of interest for the development of the economy and of science. It is important to delve more deeply into the materials of the Eighth Plenum of the party Central Committee in order to draft a richer program of study themes and with a higher methodical-scientific level, as well as to take comprehensive technical-organizational measures to implement these themes.

There are great possibilities for putting the science of biology in the service of production.

The Eighth Plenum of the party Central Committee gave the biological sciences the task of solving the concrete problems of the economy, which will constitute a powerful support for the fulfillment of the tasks of the Seventh Five-Year Plan in regard to agriculture and livestock, in the food industry and health, as well as in all the spheres of economic activity in which biological sciences are applied.

Research in the field of genetics of the plants and of animals is an important area of biological sciences. The good results attained to-date in broad production by the introduction of new types and hybrids of agricultural plants and

animals, have demonstrated the great role of selective-genetics work in increasing of yields, reducing cost, and making agricultural work as productive as possible. But in this direction the maximal, theoretical and practical limits have not been achieved.

It is true that for many species of plants and farm animals we possess genetic material with a good productive capacity. But in order for this material to be fully utilized, it is necessary to support it through other agrotechnical and zootechnical measures. Also, along with the efforts which we must make, and the additional studies which we must undertake to establish these more suitable agrotechnical and zootechnical measures, which, for the most part, are studies of a biological nature, it is necessary for us to intensify and expand genetics work in many directions, because there are great reserves in this field.

Even for corn and wheat, for which we have more results and experience, we have not utilized all the capacities which modern biology provides. Many biochemical, biophysical, biomathematical methods which enable the profound knowledge of the material base of inheritance, have not been tackled yet and constitute a great reserve to place the selective work in regard to these plants and others on a more guaranteed and reproductive basis, and to create, in a shorter time, new types and hybrids for which our economy has great need. Whereas the genetic research and the creation of complete links in selecting and in producing domestically the seeds and seedlings for the industrial agricultural crops, for fodder and for fruit trees, as was stressed by the Eighth Plenum of the party Central Committee, are far behind. The experience of selectioning work for corn and wheat, the knowledge and assimilation of new genetic methods in this field can and must help us to overcome rapidly the relative backwardness in other sectors too.

In the direction of animal genetics, without denying the successes achieved, there is no room for euphoria and self-complacency. Quite a few problems of the applied genetics of animals have yet to be applied or remain far from being solved. For years now there has been talk about and work has been done in the area of creating the desired type of cattle and we still do not have a definite idea or any good results in this direction, which could serve us as a positive example. The evaluation of pollinates of descendants, a method which is based on modern genetic concepts, has yet to be organized and remains a serious task for our scientific institutions. A great genetic-selectioning work awaits us in the direction of the creation of suitable genetic structures for the production of hybrids and of industrial cross-breedings for beef, lamb, pork and poultry. Also, the achievement of the important objectives of obtaining from special cows 5,000 liters of milk per head, and from a special flock of chickens 240-260 eggs from every chicken, requires not only reliance on the progressive experience of some units, sectors and brigades which obtain 4,000 liters of milk per cow, but also reliance on special genetic studies. Many of these genetic problems are directly connected with the improvement of the material with which the great concentration of animals which are expected to be raised in the future will be supplied.

It is clear that the basis for the creation of these types and hybrids of high yields is thorough selection and genetics work. Thus, the various genetic

studies about the manifestation of heterosis, analyzed through methods of the molecular genetics of protein polymorphism, and through mathematical-genetic methods are becoming especially important. The genetic studies concerning mutation, a method which enriches the genetic fund of crops in a very short time, by creating in quite a few cases new qualities and characteristics in the living organisms which did not exist in nature are also very important.

It is a fact that now we have created quite a good genetic material base in the form of lines, breeds and so forth, but these must be increased and enriched with materials of the natural flora or of plants and of the domestic animal breeds. The undertaking of these essential genetic studies which are of great value to the economy of the country requires not only a deepening and intensification of the study work by the institutions and scientific workers, but also a more powerful reliance on the material base, within the capacities of the state, and a better support and guidance than heretofore by the state and economic organs. The setting up on time of an experimental hot-house, of a stable or of shop, or the use of a scientific instrument to verify quickly and precisely the new genetic materials which will be created, is as decisive for the successful completion of the work as the assimilation itself and the application of a progressive genetic method.

But not all have a proper understanding of these matters. Some cadres, by occupying themselves with the daily tasks, do not evaluate correctly the importance of the use of biological methods, and as a result they do not pay attention, among other things, to the securing of the necessary material-technical base. For quite a few new directions in the introduction of genetic methods, some results have already been attained in the correct conception and application of scientific themes, of the methodology to be used in research, of calculating the necessary material base, and so forth. But their application requires continuous work and efforts by the scientific institutions, as well as by the state and economic organs led by the party organizations.

In the direction of plant physiology, on the agenda are the scientific problems of photosynthesis and of the metabolism of the crops, especially of bread grains, in order to further increase the yields of these plants and to utilize, in a rational manner and more profitably, the great investments which are made in agriculture. The task here is to study those important indicators and parameters of physiology which are closely connected to high yields, by making studies, experiments and interpretations in compliance with the concrete bioclimate conditions of the country. The study of physiological profiles of the existing hybrid types and of new ones which will be created, will enable us to make a general and more thorough interpretation of that which has occurred not only in the genetic base, but also during the development of the plants, until the yield has been obtained. Thus, to the guaranty created on the basis of the genetic studies for the creation of new types and hybrids will be added also the guaranty of their functioning under concrete environmental conditions, something which enables the attainment of more certain and more frequent results in obtaining of high yields.

In the direction of physiological research of animals, too, research has become necessary regarding the best possible utilization of fodder resources for livestock. We stress this because, along with the strengthening of the fodder base, the rational and diverse utilization of fodder in use is of prime importance. Therefore, it is necessary to increase research in connection with the waste of special fodders and with their combination in diverse rations, for different types and categories of animals, in different technological systems, and so forth.

One cannot consider as correct the ideas which are encountered here and there that the laws of the physiology of plants and of animals are known and there is not much that can be done. Not only are the laws of physiology and the knowledge not fully exhausted in the theoretical or practical terms, but what is necessary is the study of the complexity of the practical concrete parameters of the physiology of one type, of a particular hybrid or breed, which depends on a number of concrete conditions of the genetic base, of the feeding process, of the environment and so forth. It is insufficient to reach this complex of physiological parameters through theoretical speculations, but a concrete study and experimentation is required, because from these studies and experiments coefficients other than those expected are obtained which, spread over tens of thousands of hectares or in tens of thousands of animals, enable the attainment of an important increase of production.

The development of the general microbiology is an area of great scientific interest; it is closely connected to and is of great importance for the raising to a new level of research in the field of soil microbiology in order to improve its yields, in the processes of fermentation which are of great value to the food and pharmaceutical industry of the country, in special microbiology, in human and veterinary medicine. The studies of microflora have entered a new phase and the possibilities are being created for deep transformations, which have great economic benefit for many organic materials, especially for the production of scarce fodder, such as protein tips, lysine aminoacids, methionine and others, and in a not too distant future, also for the production of means of health protection for human beings, which include, in addition to antibiotics, also hormones and preparations against virus diseases. Therefore, the organization of the studies in this front has a dual purpose: to directly serve production and to lay the bases for the assimilation of future and advanced technologies based on bioengineering and genetic engineering.

Greater attention to the training of specialists and to the improvement of teaching of theoretical subjects in biology.

The successful development of the biological sciences, as is the case with all other sciences, is inseparable from the work for the training of specialized cadres.

It is clear that for the development of biology and for the correct implementation of the biological laws, a decisive role is played by hundreds and thousands of specialized cadres graduating from the narrow-profile higher schools of biology or applied biology schools, as well as those who graduate from

agricultural and medical faculties. It is for this reason that the Eighth Plenum of the party Central Committee stressed as an absolute necessity the strengthening of the theoretical-base subjects in these teaching institutions, by looking at the problem more thoroughly even in the general and vocational middle schools.

As a result of the analyses made in the spirit of the materials of the Eighth Plenum of the party Central Committee on this problem, in the schools of the narrow or broad profile of biology, a series of measures and important objectives were assigned in order to considerably improve the work in these schools.

As the analyses also showed, the great individual work which the pedagogues must carry out for the best possible assimilation of science in development, is important, keeping in mind that their obligatory postgraduate training and the utilization by them of scientific literature must serve the solving of the concrete problems of the economy. The stress is placed, among other things, on this particular demand, because positive experience has shown that the presentation for solution of a concrete scientific task of value to the economy, places the pedagogue on healthy and controllable working positions, and that the entire work which is carried out to solve an economic problem directly influences also the scientific training of the pedagogue himself, with all the valuable consequences for the improvement of the teaching process. But this must be carried out continuously and in a planned manner. And along with it, the other problems which influence the raising of the theoretical level of the subjects of biology, such as the strengthening of the material-laboratory base of teaching and of scientific work, the modernization of the teaching process in these subjects, the updating of the programs in accordance with the new developments of science, the introduction of new subjects in the teaching plans for the branches of the biological-theoretical sciences which are developing rapidly lately must be solved in a planned manner.

The solving of the major part of these problems depends on the increase of the efforts of the pedagogues and of the scientific workers, as well as on the taking of some organizational measures, whereas for the strengthening of the material-laboratory base of research, quite a few things can be realized through domestic materials, by importing only those which are essential.

The raising of the theoretical level of biological subjects in the higher institutes is connected in an inseparable manner with the further and continued improvement of the teaching plans and programs of the biological subjects in the general and vocational middle schools, with the enrichment of existing cabinets and with the setting up of new teaching cabinets of biology in these schools, with the objective of better combining the lessons in these schools with the lessons to be given in the higher schools, and to better meet the needs of production for competent workers with a middle education.

The vitalizing of scientific life of the institutions which are engaged in the field of biology, from the scientific department or sector up to the faculties, at the institute and inter-institute level, through the organizing of scientific sessions, of symposiums, of conferences for various problems of biology, the

strengthening of scientific publications of a periodic character and of monographic publications, are some ways and possibilities which must be better utilized than heretofore, so as to further advance scientific-biological thought in our country.

The workers in the biological sciences of our country are also faced with the very important task presented at the Eighth Plenum of the party Central Committee of combating the sophistic speculations in science. "Our science people," recommended Comrade Enver Hoxha, "...must also combat the sophistic speculations regarding any science, because they not only impoverish knowledge, but also cause the degeneration of science" (Enver Hoxha, "The country's progress is inseparable from the development of science and of technology," pamphlet, p 11). It is known from the history of the development of biological sciences that it has remained and remains for a long period a battleground of different opposing philosophical world outlooks. In our period too one can find in world literature the efforts and speculations of the most varied types, starting with the mechanistic ones which try to drain biology of its content and laws, and up to the speculations regarding the nature and origin of life, in which often one can note idealistic and metaphysical implications, at times masked under pseudo-scientific garments, and at other times totally unmasked. In explaining the achievements in modern biology, by relying always on dialectic materialism, we must make a clear differentiation and must establish a sharp demarcation line between scientific facts, which in itself lead to dialectic materialistic conclusions, and to various mistaken interpretations, especially speculations, which not infrequently can be found in foreign literature.

There is no doubt that our biological sciences, by marching on the road shown by the party and led by it, will mark new and greater results and successes in the future, by implementing the guidelines and directives of the Eighth Plenum of the AWP Central Committee for the expansion of scientific research, for better combining it with the economic problems of the country, for increasing its effectiveness.

CSO: 2100

## CSR, SSR PLAN FULFILLMENT RESULTS FOR 1980 PUBLISHED

Bratislava PRAVDA in Slovak 27 Jan 81 p 4

[Reports of the Slovak Statistical Office and Czech Statistical Office on the 1980 fulfillment in the SSR and CSR, respectively]

[Text] Report of the Slovak Statistical Office

The 1980 state implementation plan established that one of its fundamental tasks is to maintain, despite the increasing complexity of external as well as internal conditions, the dynamism of our national [economic] production and continually increase the efficiency of the production processes as the indispensable prerequisite for further raising the living standards and consolidating the social security system. As stated by the 18th plenary session of the CPCZ Central Committee and the subsequent plenary session of the CPSL Central Committee, the basic intentions of the state plan were largely implemented. The structural changes continued to be carried out in industry, particularly to the advantage of the engineering industry. There was an increase in industrial production and deliveries along the trends for which they were earmarked. In agriculture, there was a relatively large harvest of densely sown cereals; good results were achieved in increasing the stocks of domestic animals and in animal production developments partly by imports of fodder which in turn enabled larger deliveries of animal products to the domestic market. Several ambitious investment projects were completed with the completion of fuel pipelines, a nuclear power plant, the Prague-Bratislava freeway and other projects. Public freight transportation carried out demanding tasks in commodity transportation.

The SSR economy developed at a faster rate than the national economy and thus progress was made in equalizing the economic level of the two national republics and in strengthening the entire CSSR economy. The SSR share in the national production of resources and exports increased. The participation of the SSR economy intensified in the international division of labor and in implementation of the comprehensive program of socialist economic integration of CEMA member states.

The gains in gross national product made possible an increased availability of items of individual and public consumption.

In evaluating last year's economic developments we must not fail to take note of some unfavorable phenomena which prevented us from uniformly achieving the

required goals in structure and quality. In industry, the slower production improvements were due to the delays in the start-up of large advanced industrial facilities, particularly those processing domestic raw materials; the inadequate application of technical developments as well as the problems in supplier-consumer relations. In agriculture, due to the delayed growing season and unfavorable weather conditions, the production of root crops, bulk fodders and other products did not increase as needed. The underutilization of construction capacities and the lower level of labor productivity caused the nonfulfillment of some basic tasks in the construction and thus also in capital investment, specifically in finishing several key production facilities and reduction of the scope of unfinished projects.

These problems in the implementation of economic and social programs, however, did not overshadow the indisputable successes achieved in the development of the socialist society—from the raw material base to the living standards. This is the result of the leading role of the party in the economy and society, the dedication of the working masses and the greater cooperation with the socialist countries, and particularly the Soviet Union.

The 1980 results bring to a conclusion the implementation of tasks of the Sixth Five-Year Plan and form the basis for the 1981 and thus for the Seventh Five-Year Plan. During this period the plan tasks will be fulfilled under the new conditions of the "Set of Measures for Improving the Planned Management System of the National Economy."

#### I. Resource Formation

In 1980 the SSR economy was developing under more difficult conditions. In comparison with 1979, the national product increased 3.7 percent, the national income 3.6 percent. The growth rate in regard to both indicators exceeded the nationwide average. Industry accounted for 75 percent of the total national income increase.

#### Industry

In comparison with 1979, the total shipments of articles and commodities increased by 4.6 percent. The greater dynamism of SSR industrial organization deliveries, as compared to the national level, created conditions for their increased share in all nationwide results. The shipments for export increased by 5.4 percent, while the shipments to the socialist countries registered an even higher growth. The deliveries for domestic consumer markets increased by 3.5 percent and the capital goods shipments by 3.1 percent. The goals of the state plan were fulfilled in shipments for export to the socialist states and capital investment, although the targets for domestic trade and exports to the nonsocialist states were not fully met.

In the course of the year, there were fluctuations in the planned production structure and product mix. The continuity of supplier-consumer relations was adversely affected by the shortfalls and uneven production levels in related production sectors.

Compared with 1979, industrial production increased by 4.5 percent. The following results were achieved in individual industrial sectors in 1980:

In the mining industry, the total output was 4.54 million tons of brown coal and 1.26 million tons of lignite. The continuity of mining operations and the plan fulfillment was affected by the deteriorating plant conditions of mining.

The national economy was adequately supplied with electrical energy. The increased supply reflected the smooth operation of the V-1 nuclear power plant, whose production of 4.5 billion kWh of electric energy exceeded the 1979 production by 2.4 billion kWh and accounted for 75 percent of the total increase. Due to the higher water level, the hydroelectric power plants produced 25.5 percent more electric energy than in the previous year.

In metallurgy, production increased 3.7 percent, including a 2.1 percent increase in ore mining, a 3.9 percent increase in ferrous metallurgy and a 4 percent increase in nonferrous metallurgy. In comparison with 1979, the production of all basic metallurgical products increased with the exception of sheet metal.

Engineering production generally increased 4.9 percent, including a 5.8 percent increase in heavy engineering, a 5.4 percent increase in general engineering and a 2.9 percent increase in the electronic industry. Some problems were encountered, however, in the electronics industry and some heavy engineering plants.

The implementation of development programs favorably affected the increase in production, particularly in the manufacture of equipment for the nuclear power plants, machine tools, selected forming machines, machinery for processing of plastics, top quality machines for the textile industry as well as agricultural machinery.

Production in the chemical industry increased 3.5 percent--at the same rate as it did in the chemical subsector, crude oil processing, 5.3 percent in the rubber industry and 1.9 percent in pulp and paper production. The increase in production of synthetic fibers of 12.8 percent was primarily achieved by above plan production of polypropylene fibers. Production of unbleached semichemical pulp increased 5.4 percent, and paper and cardboards rose 4.2 percent, although the planned targets were not met.

Production of building materials increased 4.6 percent. Production of basic building materials, specifically masonry, increased 8 percent, construction panels 3.1 percent, ceramic floor tiles 3.3 percent, and wall trims (tiles, face bricks, etc) 43.7 percent due primarily to start-up of new facilities. Because of breakdowns of production machinery, the planned volume of cement production was not achieved.

In the consumer industry, production increased 5.4 percent. Larger increases were achieved in the sectors processing domestic raw materials: an 8.4 percent increase in the glass industry and a 5.4 percent increase in the woodworking industry. Production in the textiles increased 6.4 percent, in the garment industry 3.9 percent, in the shoe industry 4.2 percent and in the printing industry

4.7 percent. The plan was not fulfilled, however, particularly in the manufacture of cotton fabrics, garments, furniture, fiberboards and chipboards.

The low supplies of raw materials affected the plan fulfillment in the food industry which increased its production by only 2.7 percent. In comparison with 1979, the deliveries of poultry increased 3.4 percent, milk 1 percent, eggs 4.6 percent, cheeses 4 percent, and oils and fats 3.5 percent.

#### Agriculture and Forestry

In comparison with the poorer crop of the previous year, the total volume of gross agricultural production--Kcs 27.8 billion--increased by Kcs 1.8 billion of which plant production accounted for Kcs 1.6 billion. The plan of animal production was exceeded, but the goal in plant production was not achieved.

In comparison with 1979, the volume of market production for state reserves increased by Kcs 0.8 billion, of which plant production accounted for Kcs 0.6 billion. The plant production increase allowed larger purchases of grains, oil plants, agricultural products for industrial processing and fruit. Good results were achieved in the production of densely sown cereals. This was due particularly to the high performance strains, especially of wheat and spring barley.

The highest yields per hectare were achieved in the West Slovakia kraj: 5.81 tons for winter wheat and 5.13 tons for spring barley and grain corn. Due to the worsened climatic conditions, particularly excessive precipitation, the yields of grains per hectare in the East Slovakia kraj were lower than in 1979. The planned production of grain corn and potatoes was not achieved. These products most reflected the delayed growing season and excessive rains. The plan for rape and sugar beet production was almost fulfilled. The targets for the purchase of densely sown cereals, grain corn and rape were met. The purchase plan for sugar beet was fulfilled 97.4 percent, and that of consumer potatoes 62.8 percent.

In animal production, good results were achieved in increasing the numbers of domestic animals which--with the exception of hogs and poultry--were higher in all main types than in 1979. As in previous years, the socialist sector was responsible for the entire growth. At the beginning of this year, there were: 1,503,000 head of beef cattle in all sectors of the SSR of which 585,000 were cows; 2,788,000 pigs, 602,000 sheep and 16 million poultry.

The total milk production was 30 million liters higher than in 1979. The milk production was 3,072 liters per cow per year, which was more than planned or produced the previous year. There were more calves per cow, but fewer pigs per sow than in the previous year. The mortality of calves and pigs prior to weaning was higher than in 1979. In comparison with 1979, 16.5 million more eggs were produced, although the number of eggs per hen decreased.

The planned targets for the purchases of animal products were met 101.1 percent in slaughter animals and 106.6 percent in poultry. The purchase of milk fell 6 million liters short of the goal and the purchase of eggs for retail was 18.8 million below the planned level. With the exception of slaughter calves, the total volume of purchase animals exceeded the previous year's level.

In forestry, 5.6 million cubic meters of wood were cut last year which was 55,000 cubic meters more than in the previous year, and 38,000 cubic meters more than the annual plan had called for. There was an increase also in the deliveries of lumber which amounted to 5.2 million cubic meters, almost half of which was from coniferous trees. The export targets both to the socialist and nonsocialist countries were exceeded. Almost 20,000 hectares were reforested, so that the plan was fulfilled 101.5 percent.

### Building Industry

Construction organizations concentrated on the key construction projects in which the annual targets were met. The plan was fulfilled on the projects related to the fuel-power basis such as the Konzorcium, Soyuz and Kamishin transit gas pipelines where work amounting to Kcs 782 million was carried out and the plan was exceeded by 5.7 percent. The planned targets were met also in the transfer of construction capacities to the CSSR capital of Prague and North Bohemia kraj.

The plan of basic construction was fulfilled 95.6 percent by the construction supplier organizations, although the amount of work in the value of Kcs 28.7 billion was somewhat smaller than in the previous year. The planned volume of work according to supplier contracts was not completely attained. The fulfillment in terms of planned structure, particularly in capital investment, also was far below the target. A smaller amount of work than planned was done on several industrial projects and in the comprehensive housing construction, especially in regard to public facilities and utilities. Work progressed at an uneven pace during the entire year and as a result finishing work accumulated in the last months of the year. This was caused primarily by inadequate organization and management, but also by poor design and landscaping.

### Transportation

Public freight transportation carried 254.5 million tons of commodities and raw materials, that is 2.7 percent more than in 1979. The state transportation plan was fulfilled 100.8 percent. Railroads carried 125.2 million tons of commodities which was 1.1 percent below the plan. The planned volume of loading was not reached. CSAD [Czechoslovak State Road Vehicle Transportation] carried 126.4 million tons of commodities, that is 4.8 percent more than in 1979. River transports carried almost 3 million tons of commodities and raw materials, so that the plan was fulfilled 101.8 percent. In comparison with the previous year, 6.8 percent more commodities were transported. Sand and gravel primarily accounted for this increase in freight.

## II. Factors in Economic Development

### Employment, Labor Productivity and Wages

The national economy employed 2,268,000 by the end of the year. In addition, 117,000 women were on maternity leave. In the socialist sector excluding JKD [unified agricultural cooperatives], employment increased to 1,929,000, which was 1.4 percent more than in the previous year.

Industry, retail and public catering, among the nonproduction sectors the school and health care systems, were primarily responsible for the increase in employment. There were 688,000 workers in industry, that is 1.7 percent more than in 1979. Neither the use of working time nor of the shift work has improved. The share of overtime, however, was smaller than in the preceding year. The building industry employed 202,700 workers--1,000 more than in 1979. The number of construction personnel engaged in actual construction work, however, did not increase.

Labor productivity in industry increased 2.8 percent in comparison with 1979, and its increase accounted for 63 percent of the production increases. In the building industry, neither the planned level nor the previous year's levels were reached. This was due primarily to the slower implementation of technological developments and underutilization of working time and construction equipment capacities.

The volume of wages payable in the socialist organizations (excluding JRD) was 3.8 percent larger than in the previous year and amounted to Kcs 60.4 billion. Approximately 60 percent of the increase in the wages payable was for raising average monthly wages 2.4 percent for an average of Kcs 2,612--Kcs 2,670 in industry and Kcs 2,835 in construction.

#### Capital Investment

The volume of work and deliveries for capital construction on the SSR territory was Kcs 49 billion. The value of buildings under capital investment reached Kcs 28.3 billion. The planned growth, however, was not achieved. The construction supplier enterprises failed the plan of construction on projects with the budgeted costs above Kcs 2 million. The deliveries of machinery and equipment amounted to Kcs 20.7 billion. They increased 7.5 percent in comparison with 1979, which was more than was planned.

The planned volume of work and deliveries was generally achieved on the key projects of the state plan. Construction work, however, did not progress evenly, and as a result the planned tasks were not accomplished on one third of construction projects. The following facilities were placed on trial runs: conveyor belts at Matador Bratislava construction; production of knitted merchandise at Textile Combine Stara Lubovna; modernization of the spinning mill at BZVIL [expansion unknown] Levice; expansion of the wood pulp plant at Bukoza, Vranov; increased production of wood pulp at Chemickeluloza Zilina; modernization of the saw mill at Bucina Zvolen; production of chipboards at Drevokombinat Polomka; pipe extrusion plant at Sverma Iron Works Podbrezova; increased production at Sigma Zavadka; hydraulic equipment at Bardejov engineering plant and some others.

The suppliers' effort was also concentrated on the construction of the system of water projects on the Danube and of the Wood Pulp-Paper Combine at Ruzomberok. Finishing work was carried out on the House of Trade Unions, Technology and Culture in Bratislava, and the University Hospital and Department of Medicine at Kosice.

In the fuel-power base, the second stage of construction of the Transit Gas Pipeline, the Nuclear Power Plant at Jaslovske Bohunice, the Underground Gas Reservoirs in Zahorie, the pumped storage Hydroelectric Power Plant on the Cierny Vah,

the expansion of the Bane Mladeze [Mines of the Youth] at Novaky, and some other projects were successfully completed.

The planned volume of work and deliveries, as well as the start-up of new facilities, lagged behind on some major projects in the sectors of metallurgy, heavy and general engineering, transportation, production of building materials and the food industry, as well as on some projects in the school and health sectors.

The measures regulating construction starts were put into effect and, as a result, the starts were reduced by 30 percent in comparison with 1979. Conditions were thus created for the suppliers to concentrate on completion of projects under construction.

Although capital projects in the value of Kcs 49 billion were completed and put to use, the planned targets were not met. The goals of reduction in the number of unfinished projects and cutting down on construction time were not achieved.

#### Research and Technological Developments

The number of workers engaged in research and development increased to 50,000. The qualification structure of workers was upgraded and more instruments and equipment were made available to them.

The activity of the SSR research and development base was concentrated on the solution of basic problems of development of the national economy. Special attention was paid to more efficient consumption of fuels and energy, conservation of raw and industrial materials, upgrading technological and material standards and quality of products, and to increasing labor productivity. The research and development centers dealt with 136 problems of the state plan of technological development. Among the problems solved were for example: mining and dressing of magnesite and chrome ores; manufacture of refractory building materials; fabrics made from new fibers and fiber compositions; rationalization of production of bridges made of prestressed concrete; research and development of new biological, technological and technical procedures in production of corn.

An unsatisfactory situation existed in the implementation of tasks of the state plan of technological development. Only 84 percent of the planned number of problems were dealt with. This fact adversely affected a more substantial acceleration of the research-development-production-use cycle particularly at the decisive last stage.

#### Foreign Trade

Economic cooperation with the CEMA member states was of crucial importance for the expansion of commodity exchange in foreign trade.

The foreign trade turnover carried out by the organizations and enterprises on the SSR territory increased 10.3 percent. In accordance with the plan, exports increased more than imports. Almost 60 percent of the foreign trade volume was achieved with the socialist states to which almost two-thirds of our exports were directed.

## Financial Management

The state economic organizations in the SSR achieved positive results in the principal component of material costs--consumption of materials--as well as in handling wage and other personnel costs.

The planned reduction of material and other costs excluding depreciation, and of financial costs, however, was not achieved (the key sectors lagged behind). General costs per Kcs of adjusted output were not reduced (while the plan had anticipated a 0.3 percent reduction, these costs in fact increased 0.14 percent). The failure to achieve a reduction was caused primarily by the organizations of the SSR Ministry of Construction, the Ministry of Metallurgy and Heavy Engineering, the SSR Ministry of Agriculture and Food, and by the organizations managed by the national committees.

## III. Increase in Living Standard

The results achieved in the development of the national economy created conditions for further increase in the living standard of the population in the area of both public and individual consumption.

### The Personal Cash Earnings and Expenditures

Combined personal cash earnings were Kcs 107.9 billion, Kcs 5 billion higher than in the preceding year. Per capita income in the SSR increased 3.9 percent. Wages increased by Kcs 2.7 billion and totaled Kcs 65.5 billion. The SSR population received Kcs 20.3 billion in the form of social transfers in 1980 which was Kcs 1.9 billion more than in the previous year.

Cash expenditures were Kcs 104.4 billion and exceeded the previous year's level by Kcs 4.8 billion. A substantial part of the expenditures consisted of purchases of merchandise at the retail level which were Kcs 2.5 billion higher than in the previous year. Payments for various types of services increased by Kcs 1.4 billion. The annual increase in savings accounts deposits and liquid assets was Kcs 3.5 billion.

### Domestic Trade and Services

The population purchased merchandise in the value of Kcs 78 billion from the retail store network. This was 0.5 percent more than anticipated by the plan and 3.8 percent above the previous year's figure. The population's purchasing power made possible larger purchases of industrial goods, but deliveries to consumer markets and their makeup did not completely meet the consumer demand.

As for tourism, 7.6 million foreign tourists visited the SSR, while the number of trips by our citizens to foreign countries reached 4.6 million.

The plan of services and work for the population was exceeded 2.3 percent, which represented a 3.5 percent increase over the 1979 level. The demand for services increased particularly in the Central Slovakia kraj and in Bratislava, capital of the SSR.

Public transportation carried almost 1 billion passengers, so that the plan was exceeded 2.4 percent. In comparison with 1979, the number of passengers increased by 34 million, almost 30 million of whom were carried by CSAD. The overcrowding of the public transportation on certain routes and the unsatisfactory mechanical conditions were the main reasons for the generally low standards in travel.

In the area of communications, further modernization and automation was carried out in the network. Long-distance and international automatic dialing was expanded. By the end of the year there were 884,000 telephones in operation in the SSR, 36 percent of which were private residential. Some 25,000 telephones were added last year.

### Housing Construction

With a total of 48,100 apartments completed, the plan was fulfilled 99.4 percent, 2,900 more apartments were completed than in 1979. The apartment completions, according to the national committees' plans were met in all krajs, including the capital of Bratislava, where the number of completed apartments was 38 percent more than in 1979. The planned targets were exceeded in communal and enterprise housing construction, but fell short of the goal in cooperative housing construction as well as in construction designed to stabilize the labor force in selected enterprises. In the construction of one-family houses, 12,700 dwelling units were completed with a substantial increase in units with several rooms, floor area and improved fixtures.

In the area of public purchases, Kcs 42 billion was allocated for loans from public funds. This was an increase of more than 5 percent over 1979. Per capita Kcs 8,401 were disbursed as compared with Kcs 8,050 in the previous year.

### Schools

The kindergartens accommodated more than 231,000 children, which was 11,160 more than in the previous year and comprised 80.3 percent of all children in the 3-5 age group. Elementary schools were attended by almost 870,000 students. The number of shifts was reduced. The attendance at the "gymnasiums," vocational and junior high schools was almost 140,000 students, 35,588 of whom were enrolled in the first years of study. More than 42,000 workers enrolled in part-time studies. Almost 138,000 apprentices were trained in the labor establishments of whom 19,600 attended the courses with the graduation examination (maturita).

At the schools of higher learning, daytime study was attended by 57,600 students, including 14,026 who enrolled last year. In accordance with the scientific and technological developments in the national economy, the share of those enrolled in sciences increased to 52.2 percent. More than 19,000 workers were enrolled in part-time study.

### Health

With the construction of new health clinics, the bed capacity increased to 53,700 --35,600 of which were in hospitals.

The number of children in day-time nurseries increased to 41,700.

Through the increase in the number of physicians, the number of physicians' positions increased to more than 14,100. There is now one doctor per 305 inhabitants.

### Culture

Through various cultural establishments and institutions additional opportunities were opened for the cultural advancement of the population.

The total broadcast time by Czechoslovak Radio in Slovakia was 17,400 hours, and that of Czechoslovak Television in Slovakia 6,500 hours, 75 percent of which was in color.

A total of 191 films were produced, 20 of which were full length features. The movie theaters were attended by 21.6 million persons. A total of 309 newspapers and periodicals were published in 554.4 million copies, and 3,181 book titles with 25.6 million copies.

### Social Services

Conditions for improving the living standards were also created by the improvement of the system and increases in social security benefits.

Approximately Kcs 11.4 billion were paid in retirement benefits which was 0.9 billion more than in 1979. The increase was primarily due to the increased benefits which became effective on 1 August 1979. The number of recipients increased by 22,000 to more than 1 million. The average old-age benefit increased 3.8 percent, and of JRD members 7.3 percent.

A total of Kcs 7.6 billion was paid in health care benefits, which was 10 percent more than in 1979. At the same time allowances for children increased almost 15 percent.

### Demographic Developments

In comparison with the previous years, some changes took place in the basic trends of population's reproduction. A smaller number of live births and the increase in the number of deaths is related to the age structure of the population. There were 41,000 weddings, while 6,000 marriages were dissolved. There were 94,000 live births. The net population increase was 44,500.

### Report of the Czech Statistical Office

The development of our national economy continued in 1980 despite the worsened conditions in external economic relations in recent years. Even under these circumstances, production further increased and structural changes in the national economy continued to be carried out in accordance with the Sixth Five-Year Plan.

## Economic Developments

Industry on the CSR territory increased its production volume by 2.7 percent in comparison with 1979, and the state plan was fulfilled 99.8 percent. In accordance with the plan, engineering production developed on the priority basis, while production in the chemical industry increased at a more moderate rate. In the consumer industry, the sectors processing domestic raw materials developed more rapidly.

Among the key tasks faced by the CSR industry continued to be providing adequate supplies of fuels and energy. Although the brown coal and lignite output was 1.3 percent smaller than in 1979, no supply problems occurred. Due to the conservation measures, the fuel supplies on hand in the power plants increased further. Because of the breakdowns of mining and transportation equipment, however, the targets set for the removal of overburden in SHR [North Bohemian Brown Coal Basin] were not met. Due to the transition to more difficult geological conditions and gradual depletion of some deposits, the pit coal output declined by 0.9 percent. The electric energy supply was even without serious fluctuations. A total of 52,570 GWh was produced which was 2.8 percent more than in the previous year.

Although production in heavy engineering increased 3.5 percent, the state plan was fulfilled only 99.8 percent. In general engineering, production increased 4.5 percent and the state plan was fulfilled 99.9 percent. Production increased 6.1 percent in the electrical engineering industry and the state plan was fulfilled 100.4 percent.

In chemical industry production generally increased 2.2 percent over the 1979 level and in individual sectors as follows: in crude oil processing 1.1 percent; in the rubber-asbestos industry and plastics processing 5.4 percent; in wood-pulp and paper industry 3.6 percent. The drop in production growth in the chemical industry was caused by some difficulties in the supply of imported raw materials and in starting new production facilities.

In the building material industry production increased 4.3 percent over the 1979 level. The state plan of production fell 0.6 percent short of the goal. The plan of deliveries for domestic trade and for exports, however, was surpassed.

In comparison with 1979, production in the consumer industry increased generally 3.2 percent; in individual sectors: 4.6 percent in the woodworking industry; 2.3 percent in the glass, china and ceramics industry; 3.2 percent in the textile industry; 3.0 percent in the garments industry and 2.1 percent in leather, shoe and fur industries. The planned production volume of the consumer industry was fulfilled 100.7 percent. The plan of deliveries for domestic trade and exports to the nonsocialist countries also was surpassed.

Production in the food industry of the MPVz [Ministry of Agriculture and Food] increased 1.2 percent in comparison with 1979. The fulfillment of the state plan of production fell 1.3 percent and the plan of deliveries to domestic trade was 1.2 percent short of the goal.

Although the construction enterprises with the headquarters in the CSR accomplished with internal labor resources 2.2 percent more work than in 1979, the state plan fulfillment fell 1.9 percent short of the goal. The volume of construction work carried out on the basis of supplier contracts increased 0.8 percent including capital investment where the increase amounted to 0.1 percent.

The volume of gross agricultural production (at 1967 prices) came to Kcs 56.76 billion. The previous year's level was thus exceeded by 5.5 percent, animal production by 4.9 percent, and plant production by 6.2 percent. While the plan was exceeded 4.3 percent in animal production, it fell 5.7 percent short of the goal in plant production.

The harvested cereals amounted to 8,965,000 tons which was 15.7 percent more than in 1979. The state purchase plan was fulfilled 100 percent in cereals; 82.9 percent in sugar beet; 71.2 percent in potatoes; 115.7 percent in rape; 33.5 percent in leguminous plants, and 72.7 percent in hops. The targets set by the state plan for the purchase of animal products were met. The planned purchase was exceeded 0.3 percent in slaughter animals, 7.7 percent in poultry, 4.4 percent in milk and 4.4 percent in eggs.

The wood cuttings on the CSR territory amounted to 12.9 million plm [planary meters] which was 0.2 percent more than in 1979.

Railroads on the CSR territory carried 171.1 million tons of freight which was 0.5 percent more than in 1979. CSAD highway freight transportation carried 209.6 million tons which was 0.7 percent more than in 1979. CSAD passenger transportation surpassed the planned number of passengers by 3.5 percent.

Municipal mass transportation systems carried 2.3 billion passengers which was 2.9 percent more than in 1979. The planned tasks were fulfilled 101.8 percent. In barge transportation, CSPLD [Czechoslovak Elbe-Oder River Navigation Lines] carried 7.5 million tons of commodities which was 24.7 percent more than in 1979.

Investment work and deliveries in the CSR national economy reached the value of Kcs 90 billion (excluding action "Z" self-help projects, private housing construction, URD [Central Council of Cooperatives], CBD [expansion unknown] and unplanned construction by public organizations) which was 0.5 percent more than in 1979.

The research and development base on the CSR territory had 130,000 employees by the end of 1980. The organizations on the CSR territory dealt with 309 research and development tasks of the state plan of technological development 91.3 percent of which were completed within the specified deadlines and in required quality.

According to the preliminary results, the average number of workers in the socialist sector of the national economy on the territory of the CSR (excluding JRD [Unified Agricultural Cooperatives]) increased by 29,000 or 0.6 percent over the 1979 level. The average monthly wage of the worker in the socialist sector (excluding JRD) increased by 2.4 percent and was Kcs 2,652.

## Living Standard

In comparison with 1979, personal cash earnings increased 3.7 percent. The average per capita annual income was Kcs 24,100 in the CSR.

Loans advanced to the population by the Czech State Savings Bank increased 0.8 percent in comparison with 1979. Kcs 1.6 billion in loans to newlyweds and Kcs 330 million in state allotments, paid upon the birth of a child, were disbursed.

The savings account deposits in the Czech State Savings Bank increased by Kcs 5.2 billion in the course of the year (including estimated interest). This increase was Kcs 3 billion higher than in 1979. The total savings account deposits reached Kcs 108.9 billion, that is Kcs 10,544 per capita in the CSR by the end of the year.

The retail trade turnover in all trade systems increased, at current prices, by Kcs 2.4 billion or 1.3 percent in comparison with 1979.

The local economy enterprise and producer cooperatives earnings from public increased by Kcs 259 million or 3.1 percent in comparison with 1979, while their planned volume was exceeded by 1.8 percent.

A total of 79,655 apartments were completed in all types of housing projects on the territory of the CSR. This figure includes 77,300 apartments planned by the national committees which was 3.9 percent more than in 1979. The planned number of completed apartments, however, was not finished. Building starts were made for 66,732 apartments in all types of housing projects.

A total of Kcs 17.4 billion was paid out in health care benefits and benefits for mothers with children which was 12.5 percent more than in 1979. A total of Kcs 8.9 billion was disbursed in allowances for children—23.1 percent more than in 1979; Kcs 0.9 billion in maternity benefits—1.9 percent less than in 1979; Kcs 311 million in the child-birth allowances which, due to the decrease in the number of newborn children, was 10.6 percent less than in 1979.

A total of Kcs 30.9 billion were paid out in retirement benefits which was 6.1 percent more than in 1979. By the end of the year there were 2,746,000 retirement benefits recipients which was 4,000 more than in 1979. The average amount of the workers' old-age benefits increased 1.8 percent and came to Kcs 1,174 per month.

The development in population was marked by the decrease in the number of newborn. The total number of live births was 153,000 which was 19,000 less than in the previous year. The net population increase was only 18,000 which was 26,000 less than in 1979.

10501

CSO: 2400

DIRECTIVE ON FUEL ECONOMY EFFICIENCY IN TRANSPORTATION STUDIED

Prague HOSPODARSKE NOVINY in Czech 4 Jan 81 pp 8-9

[Article by Josef Dykast, deputy minister of transportation, CSSR: "Regarding CSSR Government Resolution Number 292/1980: Economy and Efficiency in Highway Freight Transportation"]

[Text] In almost all countries the fuel and energy situation is calling forth measures for a reduction in, and rationalization of the consumption of crude oil products.

Even though highway freight transportation does not consume a predominant share of these products in terms of their overall consumption in the national economy, regulatory measures have become the topic of numerous articles and studies in our country as well. They attract much broader interest than similar measures in other sectors of the national economy because they affect, given the current level of development of motoring, both individuals (in the area of individual motoring and mass public transportation) and organizations. Highway freight transportation, in particular, plays an important role in both the production and commercial activities of organizations.

The rational management of fuels requires the implementation of a set of measures of a technical and operational character. However, measures in the areas of the organization, planning, and management of transportation also have an important influence on fuel conservation. Many solutions suggest themselves, especially in highway freight transportation, where there is great variation in time and space relationships, as well as differences in organizational structures, planning and management methods, and significant internal interaction with other transportation fields (factory and public transportation).

These facts have already formed the basis for CSSR Government Resolution Number 241/1979 concerning the main trends in the rationalization of highway freight transportation between 1981 and 1985, with projections to 1990, which made binding and developed further the principles of state transportation policy in the area of highway freight transportation. Likewise, binding resolution number 242/1979 concerning the gradual rationalization of truck traffic in Prague pursues similar objectives.

During the second half of last year the Minister of Transportation of the federal government presented a proposal for further action, both in relation to the technical base and its utilization, and in relation to selected planning instruments and the improvement of economic management. The approved measures are incorporated in CSSR Government Resolution Number 292/1980, concerning rationalization measures in highway freight transportation from the viewpoint of fuel conservation. These measures are concerned primarily with areas of highway freight transportation in which the requirement for maximum results in fuel conservation is most important with regard to the character and extent of the assurance of the transportation needs of the national economy.

This is an unambiguous, specific program, based on the experiences of recent periods, and developed in an attempt to assure the most efficient possible operation of highway freight transportation.

#### Ways To Conserve Fuel

The reason for placing such great emphasis on carrying out conservation measures in highway trucking transportation stems from the extent to which this sector contributes to the assurance of the transportation needs within the transport system of the country.

According to data for 3 quarters of last year, highway freight transportation (not including unplanned factory transportation) accounts for 80.6 percent of the ton-amount transported, and 21.7 percent of the ton-kilometer output of all realized transport requirements. At the same time, in 1979 highway freight transport as a whole showed, in comparison with 1975 figures, one of the greatest increases of all transportation sectors, amounting to an 18.2 percent increase in tons transported, and a 35.7 percent increase in ton-kilometers.

It is possible to state, after comparing these increases when broken down into public and factory highway freight transportation, that there has already been a partial fulfillment of the directives formulated in CSSR Government Resolution Number 241/1979 regarding the division of transportation work and an increase in the share of total output contributed by public highway transportation. In particular, the increase in public highway transportation amounts to 8.8 percent in tons and 38.9 percent in ton-kilometers; and 22.3 percent in tons and 32.6 percent in ton-kilometers for factory transportation.

The above data, however, do not encompass unplanned factory transportation (including that in agriculture), which are outside the framework of statistical study. The number of vehicles in this category, however, is showing a steady increase. In 1979 they represented 41 percent of the total number of vehicles available for highway freight transportation. At present 87.3 percent of standard and specialized trucks are concentrated in planned and unplanned factory transportation, while public transportation has at its disposal only 12.7 percent of such vehicles. In comparison with 1975, when this relationship stood at 87 to 13, it is necessary to admit that, despite all the resolutions, the development of highway freight transportation has in recent years proceeded in an undesirable direction, along the path of the extensive development of factory transportation.

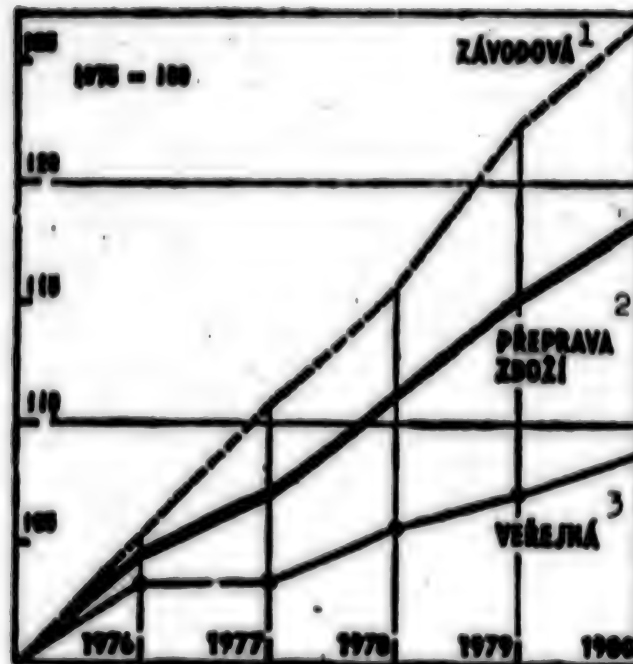


Figure 1. Percentage Increase in Goods Transported, 1975-1980; Overall, and Broken Down into Public and Factory Transport (1980: expected figures)

Key:

1. Factory
2. Goods transported
3. Public

This development, along with the reality that fuel consumption per realized ton-kilometer is about 75 percent higher in planned factory transportation than in public transportation, are clearly sufficient reason for placing such an emphasis on more effective pressure for a greater intensification of vehicle utilization, above all in factory highway transportation. It is necessary to take into consideration the fact that despite the required fuel conservation, highway freight transportation will continue to assure a significant portion of the transportation needs of our economy. During the Seventh Five-Year Plan alone an increase of 13.9 percent in tonnage transported and 25.6 percent in ton-kilometers is projected for highway freight transportation along with, of course, the more efficient utilization of the truck fleet.

In comparison with the above 1975 and 1979 figures this represents a decline which, however, expresses within the plan the desired division of transportation work in the direction of those sectors which are less energy intensive. The desired differentiation is progressing still more clearly, with a more rapid increase in public highway freight transportation and lesser increases in factory transportation.

CSSR Government Resolution Number 292/1980 emphasizes the consistent fulfillment of tasks established by preceding resolutions and clearly outlines legislative, inspection, and conceptual objectives.

Two independent documents were presented in addition to this resolution, namely the findings of the People's Control Commission of the CSSR concerning the utilization of the assets of highway freight transportation, and a proposal of the Federal Ministry of Transportation for the rationalization of fuel consumption in this sector. On the basis of these documents, the CSSR Government has established the following objectives for the upcoming period:

1. lower the number of freight-carrying and specialized vehicles for planned factory transportation according to a schedule and in relation to a reduction in the number of employees;
2. lower, on the basis of developed criteria, the number of vehicles engaged in unplanned factory transportation and, in proportion to the above, the number of vehicles counted as assets;
3. adhere (differentially) to a minimum limit on the utilization of freight carrying and specialized trucks of 54 percent of working hours (with at least 1,550 hours of operation per vehicle per year) in those sectors with planned factory transportation;
4. evaluate the existing system of incentives for fuel conservation in highway transportation, and issue uniform regulations applicable to all organizations in the national economy;
5. assure the efficient inspection of the maintenance of Reports on Motorized Highway Vehicle Operation and uphold the responsibilities stemming from the decree regarding the loading of highway trucks;
6. influence, through all available direct and indirect management instruments, an optimization of the relations between factory and public transportation from the perspective of national economic efficiency;
7. at the same time, determine gradually, and in a simplified form, basic information on truck use in unplanned factory transportation;
8. expand and intensify those transportation activities which fulfill transportation needs comprehensively and economically (for instance by introducing regularly scheduled freight routes and reserved transportation on public highway transportation, by increasing the quality of the transportation of parcels);
9. unify the activity of regional transportation terminals and expand their activity so as to contribute to economies in highway freight transport;
10. develop in plans, and in economic instruments, measures for further economizing in highway freight transport (load limits). In this regard it is important to call attention as well to CSSR Government Resolution Number 293/1980 concerning the technical condition of the vehicle fleet for highway utility transport and its further development in the 1981 to 1985 period, with projections to 1990. This resolution is not only an important directive for the technical base of highway transportation in the upcoming period, but likewise binds the Ministry of Transportation to issue a decree regarding the efficient operation of highway vehicles.

These newly approved measures, together with earlier ones (especially CSSR Government Resolution Number 241/1979) create the conditions for overall economizing in highway freight transportation. The extent and importance of the new measures is, however, broad. Therefore in the following I will focus only on certain, selected questions, solutions to which have either been worked out recently or which are in the final stages of solution.

### Research on Highway Freight Transportation

Last year, in March, the Federal Ministry of Transportation conducted, in cooperation with the Federal Ministry of the Interior, the Ministries of the Interior of the Czech and Slovak Socialist Republics, transportation administrations, regional national committees and others with equal jurisdiction, and their subordinate agencies, a nationwide research project, the goal of which was to obtain the broadest possible base for rationalization measures in highway freight transportation.

Field research conducted on 5 days spread out over a 14-day period in the second half of March yielded 72,904 filled out questionnaires with more than 5 million pieces of data.

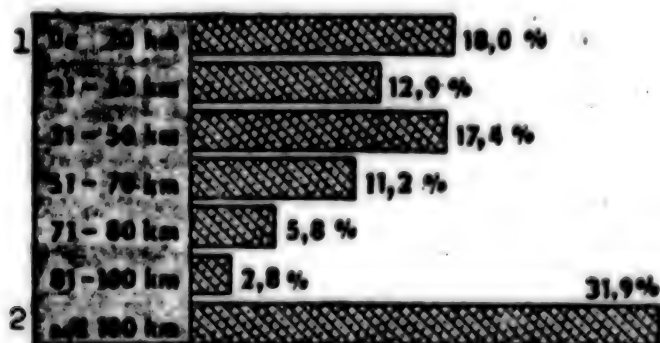


Figure 2. Results of March, 1980 control research (72,904 vehicles studied): trips according to transportation distance (percentage of total trips).

Key:

1. Less than 20 kilometers
2. More than 100 kilometers

Such an extensive set of studied vehicles justifies the application of this study to all of Czechoslovak automotive freight transportation, and the generalization of its findings with a high degree of certainty.

The facts studied came from the Report on the Operation of a Vehicle in Freight Transportation, from the verification of facts on location, from questionnaire questions, the answers to which on the part of drivers could be verified, and finally from questionnaire questions, the accuracy of the answers to which could not be verified on location. However, the questions were not of the sort that drivers would be interested in biasing their answers to them.

From the viewpoint of structure, the vehicles studied were of the following makes:

|                         | <u>percent of total</u> |
|-------------------------|-------------------------|
| Vehicles under 1.5 tons | 5.70                    |
| Avia 30                 | 20.70                   |
| Garant, Robur, Ifa      | 7.71                    |
| Praga                   | 13.92                   |
| Tatra                   | 11.81                   |
| Skoda                   | 22.90                   |
| other makes             | 17.26                   |

The control research uncovered significant unreliability in the filling out of the first document, the Report on the Operation of a Vehicle in Freight Transportation. Inaccurate entries were noted in almost one-fourth of the instances. For example, the data on kilometers traveled according to the odometer was entered for only two-thirds of the vehicles. Data on kilometers traveled was not entered for one-third of the vehicles, in one-fifth of these because the odometer did not function, and in one-eighth of the cases the document was not filled in at all.

The quality of the entries in the Reports on the Operation of a Vehicle was similar in all sectors, with some exceptions. Results were worse than average in the construction, united agricultural cooperative, and social organization sectors; better than average results were found, above all, in enterprises of Czechoslovak Automotive Transport (CSAD) and the Ministry of General Machine Building. This was basically true of the majority of the other data examined during the course of this research.

Cargo reports did not agree with the cargoes actually being transported in almost 30 percent of the cases, and a slightly higher percentage of cases had weight reports which did not agree with the weight of the cargo being transported. However, the most serious fact was that 35.2 percent of the vehicles were travelling empty.

Several findings emerged from detailed output summaries concerning the division of transportation work among modes of transportation and, within highway transportation, between public and factory transportation. For instance, in the area of long distance transport a high percentage of repetitious journeys appeared. This calls serious attention to an inadequate application of transportation systems and combined transport.

Because public transportation capacity does not match up with the requirements of shippers (the organizations of CSAD control roughly one-eighth of the total number of freight-carrying and specialized trucks employed in planned and unplanned highway transportation), it is replaced by factory transportation, even for trips over longer distances. This is manifested in a higher percentage of trips for other organizations in the longer distance zones.

From the viewpoint of the loading of highway freight vehicles, it is worth noticing that one-sixth of all round trip journeys were conducted for other organizations, at the same time that only a small part of these journeys were undertaken

in the context of servicing loading terminals (less than one-third of the total journeys--other organizations accounted for the remainder of the loading).

The research likewise indicated that CSAD vehicles made a number of trips without being fully loaded.

Of the total number of vehicles (roughly 22 percent) travelling with less than a full load (under conditions of the currently valid decree number 141/1976, Laws of the Czechoslovak Socialist Republic, concerning the loading of highway freight vehicles), 95 percent did not have permission for unloaded journeys of more than 70 kilometers. For practical purposes this means that in the course of the 5 days of this nationwide research project, about 2,000 vehicles transported goods without regard for an existing decree regarding loads. This indicates not only a low level of discipline, but also the presence of significant potential which it will be possible to utilize fully, but only through a conscious, positive attitude on the part of vehicle operators, and if not in this way, then by means of more rigorous inspections, and penalties where warranted. Regarding the amount of loading: one-third of the vehicles were travelling over 100 kilometers with their load; more than one-half were travelling over 70 kilometers, and more than two-thirds were travelling more than 50 kilometers. It is possible to conclude from these and other findings that a modification of the decree concerning the loading of highway freight vehicles will lead, given the current state of supplier-consumer relationships, to a two- to three-fold expansion in required loading standards. In particular, trips over 100 kilometers display such fundamental shortcomings that it is impossible to overlook and tolerate them any more.

Research conducted by the Federal Ministry of Transportation, as well as inspections carried out by the People's Control Commissions of the CSSR, the SSR, and the CSR, have shown that neither operators nor their supervisory agencies are devoting the attention to the rational utilization of vehicles required by the need to conserve on fuel consumption. These studies have pointed not only to the problem of how difficult it is, given such great organizational dispersion, to manage and influence highway freight transportation, but also to the necessity for minimizing such development at least in the basic directions of the shortcomings which have been identified.

#### The Main Rationalization Measures

On the basis of the foregoing information, the CSSR Government has focused rationalization measures in highway freight transportation on the following basic objectives, chosen in particular for their importance, and the extent of the expected effects from them.

##### A. Factory-related Highway Freight Transportation

1. Creation of the basis for greater utilization of the vehicle fleet through a one-time reduction in the number of vehicles, and to maintain this reduced fleet--at least for the current Five-Year Plan--through vehicle allocation procedures and by establishing a minimum time limit for vehicle utilization.

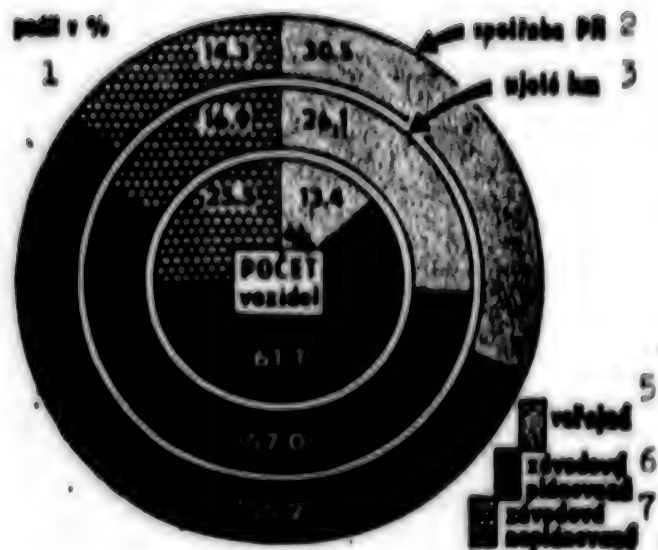


Figure 3. Number of vehicles, kilometers travelled, and fuel consumption for individual, statistically documented groups in highway freight transportation in 1979.

Key:

- |                         |                                       |
|-------------------------|---------------------------------------|
| 1. Share in percent     | 5. Public transportation              |
| 2. Fuel consumption     | 6. Factory transportation (planned)   |
| 3. Kilometers travelled | 7. Factory transportation (unplanned) |
| 4. Number of vehicles   |                                       |

The one-time reduction in the number of vehicles in planned factory transportation as of 31 December 1980 was conducted by directive following a count of the existing numbers of vehicles and the realized time utilization of them in individual sectors. This represents in aggregate almost 4,500 vehicles. Chief candidates for retirement should be, above all, vehicles which require excessive maintenance, those which are worn out or obsolete and are therefore also uneconomical from the viewpoint of fuel consumption. In some instances budgetary allocations for vehicles in 1981 will be lowered. A similar reduction has been decreed for the unplanned factory transportation sector as well. This reduction will, in and of itself, contribute to an increase in the time utilization of vehicles. In addition, the requirement of a minimal time utilization of 54 percent, given a minimum of 1,550 operational hours per year as established for planned factory transportation, will also lead to the more effective management of highway freight transportation. According to the experience of 1979 this means an increase in time utilization in most sectors of 2 to 4 percent, more in certain instances. This still fluctuates, however, within the boundaries of performance achieved in past years.

The regulation of vehicle allocation for factory transportation should assist in implementing this measure. This is a matter, to be specific, of seeing that the results achieved by this one-time reduction in the number of vehicles are not compromised in coming years by inconsistent budgetary allocations of vehicles.

2. Achieving greater efficiency in vehicle utilization by concentrating the vehicle fleet in larger units, coupled with improved management, control, and greater operational reliability of vehicles.

The concentration of vehicles in larger organizational units has already been provided for in CSSR Government Resolution Number 241/1979. The most recent resolution both mentions this objective in its introduction, and extends it with a form of association authorized by Section 360 of the Commercial Code. In the area of management and control, the resolution focuses on the main shortcomings discovered during inspections by the CSSR People's Control Commission and the Federal Ministry of Transportation. This is a matter primarily of deficiencies in filling out daily reports and in the loading of highway freight vehicles.

Vehicle down time continues to increase. In 1975 it amounted to 14.1 percent; in 1979 it was fluctuating between 15 and 16 percent. At the same time, internal factory repair facilities are not always being fully utilized. For this reason the government resolution provides for an intensification in the use of internal repair facilities and for making their work more efficient, following the example of public repair organizations.

3. Influencing gradually, through the plan, the whole factory transportation sector.

As already mentioned above, fully 41 percent of the highway vehicle fleet is outside the framework of statistical study and outside of the area covered by the planning of highway freight transportation. It is not possible, however, to master the extensive task of meeting transport needs and coordinating all types of transportation without utilizing the resources represented by unplanned factory transportation. It is, therefore, essential that this sector also be integrated, if only to a limited extent, in the planning process.

The rich transportation structure assured by this transportation sector, the great variability in relationships and organizational administration, and the resultant great demands on processing shift the implementation of this task to the realm of a gradual transfer to transportation which may be followed statistically and actively influenced by the plan, though only on the basis of certain fundamental indicators established in a differentiated manner according to the activity in question.

#### B. Public Highway Freight Transportation

1. Strengthening public highway freight transportation, depending on the plan, even above the 55 percent share established in terms of ton-kilometers by 1985 by CSSR Government Resolution Number 241/1979.

The realization of objectives concerning greater utilization of the vehicle fleet in factory transportation, as well as the tightening up of guidelines for the allocation of vehicles for the development of factory transportation, will lead to a freeing up of certain resources in the vehicle accounts. It is therefore desirable that these resources be used in those areas which hold promise for

their optimal utilization. Resources freed up in this manner ought to be used to strengthen CSAD enterprises in such a way as to assist them in exceeding the target of 55 percent of public highway freight transportation as established by CSSR Government Resolution Number 241/1979.

## 2. Creating the conditions for an expansion of efficient systems and services.

Analyses and inspections which have been conducted show that significant potential exists, even in public highway freight transportation, for more efficient vehicle operation. This is especially true in the area of transportation systems. By applying the principles of specialization in, and unified dispatching organizations for, the transportation process, and by introducing modern computational methodology and communications technology, it will be possible to achieve further economies in vehicle utilization and thereby a reduction in fuel consumption.

The development of reserved deliveries in highway freight transportation is worthy of greater attention. CSSR Government Resolution Number 292/1980 calls attention once more to this objective and decrees an expansion of the system of reserved loads, especially for sales organizations. It will be necessary to expand the scope of these services in the Seventh Five-Year Plan, following up on the transfer of responsibility for parcel shipments from the Czechoslovak State Railways to CSAD (as of 1 January 1978). The intention is to achieve such flexibility and reliability in this sector that there will no longer be a need on our highways for trucks, usually of larger tonnage, transporting one or two cartons "in the interest of timely delivery," or even private parcels, with the justification that the CSAD pickup service either could not perform the service or could, but only with a long lead time.

The resolution regarding public highway transportation also creates the preconditions for the efficient operation of these systems by providing for priority deliveries of semitrailers and smaller trailers with more than 7 tons carrying capacity in the Seventh Five-Year Plan.

## C. For All Modes of Highway Freight Transportation

1. Achieving maximum fuel savings by establishing efficient material incentives for highway transportation employees. Several sectors and organizations have already integrated the importance of the human factor in the rationalization of consumption into their conservation measures and have issued directives regarding material incentives for their employees to conserve fuel. However, differing criteria, differing definitions of the employees who are eligible, and the amounts of the material incentives may have an unfavorable influence on the required nationwide programs for fuel conservation. The resolution therefore directs the CSSR Minister of Labor and Social Affairs to issue unified principles of personal material incentives so that these principles may be applied in all organizations in the national economy in the course of the coming year.

2. Increasing the utilization of vehicle trips primarily by increased loading of highway freight vehicles.

Vehicle loading had been modified prior to the end of last year by decree number 141/1976, Laws of the CSSR, promulgated by the Federal Ministry of Transportation. According to this previous decree, trips by CSAD trucks in excess of 70 kilometers were forbidden unless the vehicle was loaded in both directions to at least 60 percent of its load capacity. Insofar as the vehicle operator did not have the requisite load he was required to notify the organization entrusted with vehicle loading by the regional national committee of the intended trip. The ban on such trips did not apply if the loading location did not provide the organization with a load for its truck within a specified period, or if the proposed trip was expressly permitted by the decree.

Federal government resolution number 320/1979 provided, among other things, for the preparation of the necessary measures for intensifying and expanding the activities of loading services, thereby significantly reducing empty and lightly loaded trips in highway truck transportation. One of these measures is a new decree, number 139/1980, which took effect on 1 January of this year.

Positive experiences in the loading of highway freight vehicles both at regional terminals and CSAD enterprises were utilized in the formulation of this decree. The studies conducted unambiguously demonstrated that the optimal loading of highway freight vehicles may be assured only by systematized, unified, and modern management supported by computer and communications technology. The new decree makes such management fully possible.

The decree makes more precise, and intensifies, existing loading conditions in the following areas:

--it expands the range of vehicles covered by loading guidelines (it includes flatbed trucks, dump trucks, and universal closed back trucks over 2.1 tons load capacity in 1981, and over 1.5 tons load capacity beginning in 1982, given loads up to 70 percent of the capacity of flatbed vehicles and 55 percent of the capacity of dump trucks and closed back trucks);

--it shortens the travel distance covered by obligatory loading from 70 kilometers to 50 kilometers;

--it modifies transport on lines reserved for CSAD enterprises by means of a separate resolution;

--it shortens reporting deadlines from the current 3 days to approximately 1 1/2 days;

--it alters the method for issuing confirmation of suboptimal loading by the loading terminal (this will now be done by an entry in the Report of Vehicle Operation);

--it specifies instances not covered by the decree, for instance trips by special or specially modified vehicles, trips needed to prevent an immediate threat to life or health, trips undertaken by the freight taxi service, vehicle trips to the repair shop, trips undertaken at the order of a national committee.

The decree presupposes a significant improvement and strengthening of the activities of loading terminals throughout the CSSR.

The implementation of the decree will require certain additional measures, especially:

--the expression in the plan and the budget of changes in loading activities from the viewpoint of the make up of, and services provided by, loading terminals.

--the modification of price regulations and rates for the services performed at loading terminals;

--in the interest of building a uniform loading system permitting the use of computer technology, a single organization subordinate to the national committee is to check the function of the loading terminal in all regions. In this regard, CSSR Government Resolution Number 292/1980 approved measures for more flexible loading.

3. Creating the preconditions for the economical operation of automotive freight transportation in the plan and in economic instruments.

This task, which also includes the establishment of temporary limits on the costs of factory transportation, is closely tied to the Set of Measures for Improving the Planned Management System of the National Economy After 1980. Its objective is to assure, in the area of highway freight transport as well, comprehensive efficiency in the treatment of capital assets, i.e. the vehicle fleet, fuels, and even the labor force (keeping in mind the concrete conditions of individual branches and sectors, as well as in organizations the tasks of which highway factory transportation helps to provide). The implementation of the directives and tasks stemming from the resolution of the federal government will place large demands not only on central agencies, but mainly will require a significant strengthening of discipline and economy consciousness in factory transportation as well, which will often require the suppression of narrow sectoral interests.

#### Technical Condition of Vehicles

Vehicle operation management for motorized transportation has been modified in the past by a number of regulations, especially decree number 119/1962, Laws of the CSSR, as embodied in decree number 167/1964, Laws of the CSSR. This decree was, however, revoked as of 1 July 1972.

At present the problem of caring for the technical condition of highway transportation resources is resolved solely by sectoral or intraenterprise directives and measures, which concern themselves with partial issues, individually, not in a uniform manner and, mainly, incompletely. Therefore the Federal Ministry of Transportation is preparing a general legal regulation which establishes the conditions, rights, and responsibilities of all direct participants who have a stake in the proper technical condition of vehicles and in their economical operation. This regulation will define maintenance comprehensively, particularly, however, with a view to the owners (operators) of highway vehicles.

This newly prepared decree will also include a broad range of issues of a technical operational character. It will consider above all those contingencies which affect most significantly the economical operation of highway vehicles, the safety of highway transportation, and the moderation of negative influences on the environment.

All of these considerations influence, to be sure, not only the operator of vehicles, but also their producers and, moreover, the automotive repair shops. In this regard it is proper to emphasize that the responsibilities of vehicle producers (and importers, insofar as it is a matter of imported vehicles) have already been set forth in Federal Ministry of Transportation Decree Number 90/1975, concerning the conditions of operation of surface communication vehicles. The responsibilities of automotive repair shops and their relationships with consumers are outlined by Ministry of General Machine Building Decree Number 137/1964, Laws of the CSSR, as stated in government decree number 38/1966, Laws of the CSSR. Therefore, the proposed new decree modifies the responsibilities which must be met by organizations which administer, own, or utilize either highway motorized or trailing vehicles, and the objectives of economic management agencies.

Modification of the following points is proposed in particular:

--vehicle maintenance: a distinction is made between daily service, vehicle diagnosis, planned, three-stage maintenance (A-after 5,000 kilometers, or after no more than 3 months of vehicle operation; B-after 15,000 kilometers, or after no more than 6 months of vehicle operation; C-after 45,000 kilometers, or after no more than 18 months of vehicle operation), and seasonal maintenance according to established periods;

--vehicle repair: routine repairs and major overhauls, the latter with certain limitations tied to the economic life of the vehicle;

--basic principles for tire maintenance.

The issue of fuel management will be treated in the prepared decree in line with the directives of the Federal Ministry of Transportation of 3 November 1979 (regarding the method of standardizing the fuel consumption of highway vehicles).

The methodology for establishing operational standards for fuel consumption will be contained in an appendix to this decree. The standards will impose maximum limitations and will be based on the fuel consumption data contained in the technical manual for the vehicle. Technical operational conditions will be accounted for with operational supplements. A similar, but clearly much simpler, approach will be taken in establishing operational standards for the consumption of lubricants.

The solution to these problems will challenge the current level of the technical base, as well as the considerably heterogeneous maintenance systems practiced today by individual vehicle owners.

Further assurance of the technical condition and economical operation of highway vehicles should occur, from a technical standpoint, under the conditions set forth

in CSSR Government Resolution Number 293/1980 concerning the technical condition of the vehicle fleet for highway utility transportation. This resolution provided for a limitation in the granting of waivers from the prescribed technical parameters of vehicles, in addition to increasing the requirements for approval of the technical worthiness of highway transportation assets. The main directions in the technical development of the highway utility transportation fleet are concentrated on the following objectives--with a view to the societywide needs of the national economy and progressive trends in the development of the technical operational parameters of highway vehicles:

--a permanent increase in the operational reliability of highway freight vehicles and buses, primarily by means of preventive technical inspections so that the consumption of spare parts and accessories will drop, by 1985, to 25 percent and by 1990 to 15 percent of the value of delivered vehicles;

--a gradual increase in the useful life of highway freight vehicles and buses produced beginning in 1981 by means of standard maintenance at minimal kilometer distances between complete overhauls;

--the production, beginning in 1984, of a standardized series of nonsupercharged and supercharged diesel engines to power utility vehicles;

--vehicle innovation, for instance through deliveries of vehicles with a minimum motor output in terms of mass of 5.9 kilowatts per ton for units used over limited distances; reductions in the rolling resistance of tires; in aerodynamic resistance, in the resistance of the transmission mechanism, in the equipping of vehicles with controlling and measuring instruments, etc; a reduction in the relative labor intensiveness of the planned maintenance schedules, and the like;

--the gradual satisfaction of demands for repair and servicing facilities for utility vehicles in public automotive repair enterprises (principally for heavy duty trucks and buses);

--the assurance of the necessary technical condition of highway freight vehicles and buses by eliminating the long-standing and critical shortage of spare parts (at the same time establishing standards for the consumption of spare parts and accessories);

--a reduction in direct operational costs and in absolute and average fuel consumption.

The extent and seriousness of all the measures which stand before the employees of highway freight transportation in the near future, and which are particularly pressing for the Seventh Five-Year Plan, are in all respects different in character from those of recent years. The main emphasis is being placed on a qualitative improvement of transportation activity and on a significant increase in the efficiency of operation. The direction on which we have embarked falls quite naturally within the objectives outlined by the Set of Measures for Improving the Planned Management of the National Economy After 1980.

## CROP, LIVESTOCK PRODUCTION FIGURES LISTED

Warsaw ZYCIE GOSPODARCZE in Polish 12 Oct 80 pp 1, 9

[For related article see JPRS 77403, No 2093, of this series, 7 Feb 81 pp 27-35]

[Excerpt]

Table 1. Cultivable Plant Yields and Crops, Livestock Production, and Grain-Intensiveness and Feed-Intensiveness of Livestock Production (annual averages of five-year periods)

| <u>Itemization</u>  | <u>1966-70</u> | <u>1971-75</u> | <u>1976-79</u> |
|---|----------------|----------------|----------------|
| Arable land in millions of hectares   | 19.50          | 19.33          | 19.08          |
| Crops of cultivable plants in millions of tons of grain units                           | 53.9           | 60.7           | 60.7           |
| Per hectare yields in grain units   | 27.6           | 31.4           | 31.8           |
| Grain crop area in millions of hectares   | 8.40           | 8.23           | 7.87           |
| Share of grain acreage in percentages of arable land                                    | 43.4           | 42.6           | 41.4           |
| of area under crops   | 56.6           | 55.8           | 54.0           |
| Harvested grain crops in millions of tons   | 17.0           | 20.9           | 19.8           |
| Grain yields in quintals from 1 hectare   | 20.1           | 25.4           | 25.1           |
| Grain and feed imports in millions of tons  | 2.1            | 4.0            | 7.8            |
| Feed consumption by productive livestock in millions of tons of grain units, including: | 33.8           | 42.9           | 46.7           |
| nongrain feeds, and   | 24.1           | 27.6           | 27.7           |
| concentrated feeds <sup>1</sup>   | 9.6            | 14.9           | 18.5           |
| Livestock production in millions of tons <sup>2</sup>                                   | 4.61           | 5.57           | 5.91           |
| Feed consumption in grain units per 1 kg of livestock production, in which:             | 7.33           | 7.70           | 7.90           |
| nongrain feeds,   | 5.23           | 4.95           | 4.69           |
| concentrated feeds <sup>1</sup>   | 2.08           | 2.67           | 3.13           |

1. In weight units.

2. In conversion units (1 ton of meat-fat bulk, equalling 1 ton of eggs, equaling 6.7 tons of milk, equalling 0.28 ton of wool).

Table 2.

| <u>Itemization</u>   | <u>Private<br/>farming</u> | <u>Socialized<br/>farming</u> |
|--|----------------------------|-------------------------------|
| Total grain production in kg per hectare                                     | 950                        | 840                           |
| Concentrated feed consumption in kg per hectare                              | 920                        | 1,150                         |
| Livestock production in kg per hectare                                       | 336                        | 284                           |
| Concentrated feed consumption per kg of livestock<br>production              | 2.74                       | 4.06                          |
| Value of ultimate net plant production in thousands<br>of zlotys per hectare | +3.7                       | -0.5                          |

CSO: 2600

# DECREE ON RELATIONS BETWEEN AGRICULTURAL MACHINE STATIONS, UNITS

Bucharest BULETINUL OFICIAL in Romanian Part I No 114, 26 Dec 80 pp 1-5

[Decree of the Council of State Regarding the Regulation of Relations Between Agricultural Machine Stations and Agricultural Units Belonging to Unified State and Cooperative Agroindustrial Councils]

[Text] The Romanian Council of State decrees:

Article 1. Together with state and cooperative agricultural units, agricultural machine stations (SMA) are responsible for the complete fulfillment of the agricultural production plan, for which purpose they enter into cooperation contracts for the mechanized performance of agricultural work in accordance with technologic standards, including transportation of the harvest and clearing of the land.

SMA's enter into cooperation contracts with each individual agricultural unit.

Article 2. SMA's discharge their responsibilities to agricultural units for the fulfillment of planned production, through the execution at the optimum time and under the best conditions, of mechanized work, irrigation projects, and crop chemification, according to contracts and approved technologies, and in compliance with the standards established by the Ministry of Agriculture and the Food Industry (MAIA).

In turn, state and cooperative agricultural units are responsible to SMA's for providing at the proper time and according to the provisions of the plan, seeds, fertilizers, and pesticides, selecting and treating the seeds, transporting the production stipulated to be moved with the means available in the units, executing in time and under good conditions the manual work and other obligations incurred in contracts, as well as achieving the agricultural production as a result of the performance of this work.

At the same time, state and cooperative agricultural units will supply the quantities of natural fertilizer needed for each crop, according to the provisions of the plan.

Article 3. Workers' councils in state agricultural enterprises (IAS), the management councils of agricultural production cooperatives (CAP), and other collective management organs in every agricultural production unit belonging to a unified state and cooperative agroindustrial council (CUASC), are responsible for the proper administration and use, in accordance with the law, of the entire land area held by the unit, the continued development and growth of production, the rigorous application of standards stipulated in technologies, and the judicious use of all material and financial resources, so as to fulfill all the production tasks stipulated in the plan, and to obtain maximum efficiency for all activities.

District peoples' councils together with CAP's, are responsible for seeing that all the land area made available for use to cooperative members or other persons, or owned by producers with individual homesteads, is worked in its entirety in accordance with the cultivation plan, so as to achieve established productions.

In order to increase agricultural production, rationally utilize the productive potential of the land, uniformly apply technologies, and use the same standards of fertilizer, pesticide, and other product consumptions throughout the territory of units belonging to a CUASC, crop rotations are organized independently of the ownership of the fields, grouping the fields into tracts with homogeneous cultivation and with optimum dimensions for mechanized work.

For tracts composed of fields that belongs to a single agricultural unit, the unit is responsible for performing all the work on time and under good conditions, so as to assure maximum production at lowest cost. The production obtained on these tracts belongs in its entirety to the respective unit.

Tracts composed of fields that belongs to several agricultural units are placed under the responsibility -- for executing all the work and obtaining the planned production -- of the unit which holds the largest area of land in the tract, or of another unit which has the best possibility for organizing production and utilizing the land, as established by a CUASC. The production obtained on these tracts is divided in proportion to the land area held by each unit, as a function of the average production obtained over the entire area of the tract.

All the vegetal production activity of agricultural units in a council is obtained in an unified manner on the basis of a program established through a plan for agricultural organization and exploitation, for each separate tract.

Each CUASC must take steps to increase production and develop the fodder base, so as to fully meet from its own production the fodder needs of the animals held by its units, as well as to fulfill its obligations to the state fund.

Article 4. For the mechanized execution of agricultural work, SMA's organize as part of mechanization departments, large groups which will be responsible for all the mechanized work stipulaed in technologies for a number of tracts and crops.

These teams are of a permanent nature, are usually organized at agricultural production farms that belong to units of a CUASC, and will operate at least for the duration of one production cycle or one calendar year.

The size of the teams is established by the unified council together with the SMA and the managements of agricultural units, as a function of the volume and structure of the mechanized agricultural work stipulated in technologies.

Horticultural units, as well as those agricultural units which hold land planted with vegetables, potatoes, alimentary legumes, fruit trees, and vineyards, and that are organized into farms, will form, depending on circumstances, specialized mechanization sections or teams to execute the entire volume of work.

Agricultural units which hold areas planted in fodder and pastures, and that are organized into farms, will be provided with the specialized mechanized means for the execution of the work.

At peak periods, to execute plowing and seeding operations at optimum times and under good conditions, as well as to harvest crops on time and without losses, all the mechanized means and personnel in agricultural units will be concentrated on the performance of the work corresponding to that period.

When the agricultural work in several sectors must be performed at the same time, unit managements will establish priorities and will distribute the available manpower and mechanized resources so as to assure the concurrent and proper execution of all necessary work.

Programs for work campaigns are established by a CUASC together with an SMA and agricultural units.

All workers who participate in programs, as well as the agricultural organs charged with program performance supervision, must respect the programs, and any modifications can be made only with the agreement of those who formulated the programs.

Article 5. Large mechanization teams will be led by agricultural specialists who organize activities and who, together with machine operators, are responsible for the execution of work stipulated in technologic standards for each crop, the application of chemification and irrigation programs, the achievement of planned productions on tracts and distributed crops, as well as the economic utilization of tractors and agricultural machinery, the respect of consumption standards for fuels and lubricants, and the achievement of the incomes and expenses planned both for the respective farm and the mechanization team.

Article 6. The activity of a farm and machine operator team is carried out on the basis of a joint production plan and an income and expense budget, which will uniformly include the tasks of the farm and team as part of the production plans and income and expense budgets of the agricultural units and the SMA.

The farm chief specialist undertakes the obligation of executing this plan and obtaining production and economic results, both toward the management of the agricultural unit and toward the SMA.

Article 7. The obligation to achieve the agricultural production is undertaken as a comprehensive agreement by each specialist with the farm and team for which he is responsible, both toward the agricultural unit in which he carries out his activity and toward the SMA.

Conversely, machine operators and the remaining permanent personnel in farms and sections undertake the obligation to achieve production, as a comprehensive agreement, toward the farm chief.

The comprehensive agreement contract will stipulate -- on the basis of technologic standards formulated by MAIA -- the volume and execution schedule for all planned production, the sums owed as remuneration, rates per unit product, and quality indicators.

Farm chiefs, sector chiefs, and machine operators in teams, are responsible for the execution of the work and the achievement of the production undertaken as an obligation under the comprehensive agreement, and for work performed with the assistance of other teams.

Article 8. All specialists who work in production units belonging to a CUASC are subordinated to the latter.

Specialists work in state or cooperative units as representatives of the state, and are directly responsible for the production and economic tasks assigned to them.

In all agricultural units, except for staffs assigned or elected as directors in their management, chairmen of CAP's, or chief engineers, all agricultural specialists are directly responsible for the activity of farms or production sectors, and for the achievement of planned production and economic results.

Article 9. County peoples' councils together with general directorates for agriculture and the food industry, assign production plans and economic-financial indicators to each state and cooperative agricultural unit, as well as -- as a whole -- to CUASC's. The technical-material base assigned to each agricultural unit is distributed at the same time as the production tasks.

CUASC's, together with agricultural units, assign plan tasks by tracts, as a function of their different degrees of suitability, the production potential of the land, and the available technical-material basis, assuring the achievement of the production levels stipulated in the plan.

The plan will be submitted for discussion and approval, to the general assembly of each agricultural unit, and subsequently to the general assembly of the CUASC.

Article 10. Each state and cooperative agricultural unit conducts all its activities according to the principles of self-management and economic-financial self-administration, and must administer with maximum efficiency its available material and financial resources, meet its expenses from its own income, and obtain profits, under the conditions provided by law.

Article 11. State agricultural enterprises, CAP's, the SMA, and other agricultural units belonging to a CUASC, are each individual plan assignees and carry their own contractual responsibilities, being obligated to assure the achievement of production and delivery tasks for all crops and agricultural activities, under the conditions provided by law.

Expenses necessary to perform work on tracts that include land belonging to several agricultural units, are borne by each of these units as a function of the area which they hold. To this end, the money necessary for these expenses will be deposited by each unit to the account of the agricultural unit which has been assigned the responsibility for the respective tract.

According to law, the Bank for Agriculture and the Food Industry provides the credit needed by each unit to cover production costs.

After the harvest is ended and the production has been delivered, the expenses that have been undertaken will be reimbursed as a function of the production obtained and the area held by each unit.

Article 12. The mechanization sections of SAM's will provide technical assistance and effectively remedy defections in mechanization teams, as well as perform repairs, installations, and services for socialist agricultural units and homesteads of the population.

Article 13. Each county will form specialized centers subordinated to and managed directly by trusts for agricultural mechanization, irrigations, transportation, and equipment production for agriculture and the food industry, which will assemble equipment and installations for animal raising, as well as provide technical assistance, metal constructions, services, capital repairs of specific tooling, and instruction for the personnel in animal-raising production activities.

Article 14. The amounts owed to SMA's for mechanized work performed at state and cooperative agricultural units, including crop chemifications and irrigations specified in cooperation contracts, are paid on the basis of rates per unit of agricultural product, in proportion to the productions achieved by each agricultural unit.

In order to obtain early vegetables of the best quality and at the optimum time, in accordance with the provisions of established programs, SMA's may receive production bonuses in addition to the stipulated rates, according to law.

The work and services listed in the appendix are paid on the basis of fixed rates, according to prevailing legal regulations.

Article 15. Work performed by SMA's to mechanize agriculture as part of mutual aid actions are paid at fixed rates corresponding to the respective work, by the SMA in whose area the work is done and which has assumed responsibility for activities under a comprehensive agreement. The amounts owed to agricultural machine operators for the work, are settled in their entirety on the basis of receipt documents at the end of the month.

Article 16. Agricultural work performed by SMA's at state agricultural units is paid in money, while the work performed at cooperative agricultural units is paid in money or in kind, according to prevailing legal provisions.

For work paid in money, agricultural units pay during the year, at the times established by law, 80 percent of the sum owed on the basis of rates applying to the work performed.

For work paid in kind, cooperative agricultural units will deliver during harvest, to collection enterprises and to the accounts of SMA's, 80 percent of the amounts determined according to the rates for the work performed, except for the tithe, which is delivered in its entirety as a function of the harvested production.

The rights owed to SMA's for work paid in kind will be delivered by cooperative agricultural units in useful amounts, before other obligations to the state, except for debts incurred for seed and for products borrowed from the state fund.

For the receipt of products owed to SMA's in an order other than that stipulated in paragraph 1, collection enterprises will pay the SMA's penalties of 0.05 percent for each day of delay, calculated at the value of the products that are not received, as determined on the basis of their disbursement prices.

Article 17. Within at most 20 days from the end of harvest work for each crop, the rights owed to SMA's are recalculated in terms of rates per unit product, as a function of the area planted, the work effectively performed, and the production achieved, in useful amounts.

In establishing the rights owed to SMA's, the calculations will also take into account the production that was not obtained as a result of calamities recognized by ADAS (State Insurance Administration), and for which cooperative agricultural units received damage payments.

For crops damaged by natural events, state agricultural units will pay for the work performed by SMA's according to prevailing legislation.

Agricultural units will pay the differences owed to SMA's within 25 days from the end of harvest, in money or in kind. If CAP's no longer have sufficient amounts of products from their respective crops for paying these differences, they will deliver equivalent products to collection units, so that SMA's will be paid their full rights in kind.

If state and cooperative agricultural units fail to pay on time the value of mechanized work in money, SMA's will place with the bank requests for collection which will be charged to the accounts of the units.

For crops where the rights owed to SMA's are lower than the effective collections, the difference will be returned in rights due for other crops or will be reimbursed to the respective agricultural units from the first monies received by SMA's within 25 days from the end of the harvest of the respective crop.

SNA's which do not have funds to reimburse the sums collected in excess of the rights owed to them as a function of the productions obtained by agricultural units, will be able to receive special credits within the law, to cover the sums to be reimbursed.

A final balance with respect to productions obtained is calculated at the end of the year.

Article 18. Agricultural machine operators and other personnel in agricultural mechanization teams will be paid as part of a comprehensive agreement by SNA's according to law, at rates per ton of product, without limits, in proportion to the production obtained for each crop by the team to which they belong, independently of the production achieved by other teams or by the serviced units as a whole.

The heads of mechanization sections and maintenance mechanics must assure the proper operation of machinery and tools, including during field work periods, and will be paid in proportion to the average remuneration rate of the agricultural mechanics who work under a comprehensive agreement in the teams they service.

If the committed production is exceeded, the amounts owed for full payment of all rights in the comprehensive agreement, and the respective remuneration fund, are recalculated as needed and released according to law.

If the conditions for using the comprehensive agreement form of remuneration are not created, agricultural machine operators and other personnel in teams will also be able to work under direct agreements and receive monthly advances of 80 percent of the rights owed them for the work performed. The remaining difference will be paid after the harvest, as a function of the achievement of the planned production, and it will be possible to increase or reduce the rights owed by as much as 20 percent.

During periods in which agricultural machine operators cannot be employed for mechanized work at the farm at which they are working as part of a team, they will be assigned to perform mechanized work in other teams. They can similarly be employed to perform manual labor at the farm, in which case they are paid directly by the agricultural production unit according to rates applicable for the work.

Moreover, during periods in which tractors, means of transportation, and other equipment is not needed for agricultural work, it will be used for work in transportation, construction, road building, water management, land improvement, and other similar projects, and will be paid on the basis of legal rates.

Article 19. Personnel in teams, mechanization sections, and shops, can receive bonuses during the year, according to law, for savings in the consumption of materials, fuels, and energy, with respect to established standards.

Article 20. The major indicators on which is based the remuneration of personnel in the management of SNA's, are the fulfillment of value plans for vegetal production in the state and cooperative agricultural units serviced, and of the total planned volume of work.

Article 21. After they have met their obligations to the state fund, CAP's and state agricultural units can sell to the working personnel of mechanization teams, sections, and sectors, upon their request, and under conditions stipulated by law for cooperative members, an amount of 120-150 kg of wheat and corn per person; the same amounts can also be sold for each child under 16 years of age, to only one of the parents.

Article 22. State agricultural units will take steps to provide at cost, hot food for the working personnel in mechanization sections and teams.

It is recommended that the provisions of paragraph 1 also be applied by cooperative agricultural units.

Article 23. CAP's can assign lots for use, under the conditions stipulated by statute, to machine operators and other workers who are members of the cooperative and work in mechanization sections or teams organized in IAS farms.

Agricultural machine operators and other workers who use and maintain agricultural equipment and who are not members of CAP's, can receive a lot with an area of up to 0.10 hectares from the state agricultural unit in which they work.

Article 24. CUASC's together with CAP's will take measures to gather the fields assigned as lots for personal use into large tracts specially organized near villages, assuring the mechanized performance of major agricultural work for pay.

Article 25. By the date of 15 February 1981, MAIA and the National Union of Agricultural Production Cooperatives, together with the Ministry of Finances, will establish a system of records for expenses and financial results to be used in the cooperation among agricultural units.

Article 26. By the date of 31 December 1981, MAIA will present proposed uniform rates for work performed by SMA's in state and cooperative agricultural units.

Article 27. On the date of the present decree, the following are abrogated: article 96 paragraph 5 of the Law on Remuneration According to Quantity and Quality of Work, No 57/1974, reprinted in BULETINUL OFICIAL No 59-60 of 23 July 1980; article 45 paragraph 3 of the Law on Remuneration in Cooperative Agricultural Units, No 27/1976; article 1-4 of the Decision of the Council of Ministers No 1004/1971, regarding the payment for work performed by enterprises for the mechanization of agriculture in proportion to the production obtained by agricultural production cooperatives; article 3 paragraphs 4-5 and article 5 paragraphs 4-7 of the Decision of the Council of Ministers No 1970/1970 regarding improvements in the material vested interest of workers in enterprises for the mechanization of agriculture; as well as any other contrary provisions.

Nicolae Ceausescu  
President of the Socialist Republic Romania  
Bucharest, 23 December 1980  
No 390

## APPENDIX

List of agricultural work and services performed by agricultural machine stations in state and cooperative agricultural units, paid on the basis of fixed rates

1. Harvesting, performed as a special operation \*)
2. Threshing, performed as a special operation \*)
3. Hay raking
4. Baling, gathering, and stacking
5. Silo packing
6. Fodder chopping
7. Corn threshing
8. Grinding
9. Scarifying \*\*)
10. Soil breaking \*\*)
11. Land clearing \*\*)
12. Land reclamation \*\*)
13. Work in plantings that have not borne fruit (trees, vineyards, strawberries, gooseberries, and so on)
14. Work performed on fodder crops that are not harvested by mechanized means
15. Work on pastures
16. Loading-unloading
17. Transportation
18. Stationary work
19. Scraper and bulldozer blade work
20. Ditch digging
21. Levee building
22. Potato sorting
23. Breaking up chemical fertilizer
24. Technical assistance work (maintenance, repair, equipment and installation assembly, and so on)

\*) Except for work performed under a comprehensive agreement

\*\*\*) Except for preparation work included in projects

11,023

CSO: 2700

DECREE ON INDUSTRIALIZATION OF PRODUCTS OF FARMERS

Bucharest BULETINUL OFICIAL in Romanian Part I No 114, 26 Dec 80 pp 5-7

[Decree of the Council of State Regarding the Organization of Services for Industrializing Certain Products of Agricultural Producers]

[Text] The Council of State of Romania decrees:

Article 1. In order to satisfy to the largest possible extent the consumption needs of agricultural producers and their families, for sugar, oil, and other products, socialist units have the obligation to provide services for processing the raw material obtained by these producers, from the cultivation of the land which they hold for utilization or as personal property.

Article 2. Producers who deliver for industrialization the agricultural products stipulated in the appendix to the present decree, will receive in proportion to the quantity and quality of raw materials delivered, the amounts of sugar, oil, and other subproducts stipulated in the same appendix.

Article 3. The raw materials are delivered by producers to a consumer cooperative unit, and the materials are processed by state units of the food industry to extract sugar and oil.

In return for collection and industrialization services on raw materials, socialist industrialization units retain the amounts of products stipulated in the appendix.

Article 4. Producers receive their due quantities of sugar, oil, or other subproducts resulting from the processing of raw materials, either upon delivery of the agricultural products or in installments at the times and in the amounts agreed upon with the consumer cooperative unit which collects the raw materials.

Article 5. The Ministry of Agriculture and the Food Industry (MAIA) together with the Central Union of Consumer Cooperatives (UCCC) must organize and assure the collection of the total amount of raw materials obtained by producers on their own land or on land held for utilization, and submitted to processing.

At the same time, MAIA together with the executive committees of county and the Bucharest peoples' councils, have the obligation to take steps to support members of agricultural production cooperatives (CAP) and agricultural producers who have their

own homesteads, with seeds, planting materials, selected varieties of plants, and specialized technical assistance, so as to assure proper cultivation and the largest possible production on their land, of crops which are raw materials for sugar and oil.

Article 6. Under the conditions of the present decree, MAIA together with UCCC will organize the collection and industrialization of other vegetal, agricultural, and animal products, such as: milk, fruits, grapes, meat, and so on, with corresponding payment in money or in kind for the respective services.

Similarly, MAIA together with the National Union of Agricultural Production Cooperatives will take measures so that all state and cooperative agricultural units will deliver all the existing grape seeds, pumpkin seeds, and other similar subproducts which can be industrialized, in accordance with the tasks established in plans.

Article 7. Within 30 days from the effective date of the present decree, MAIA together with UCCC, the State Planning Committee, the Ministry of Finances, and the State Committee for Prices, will establish technical standards for collecting, storing, transporting, and determining the useful content and processing yield of the agricultural raw materials delivered by producers, as well as for delivering the industrialized products and accounting for operations among units.

Nicolae Ceausescu  
Chairman of the Socialist Republic Romania  
Bucharest, 23 December 1980  
No 391

#### APPENDIX

##### List of agricultural products that can be delivered by producers for processing to extract sugar and oil

| Agricultural product | Unit | (A) | (B)                                      | (C)*                                    |
|----------------------|------|-----|--|---|
| Sugar beet           | kg   | 100 | 8.5 sugar                                | 3.5 sugar<br>4.4 molasses<br>83.6 scrap |
| Sunflower seed       | kg   | 100 | 38.6 oil<br>30.0 groats                  | 4.0 oil<br>6.0 groats                   |
| Soy grain            | kg   | 100 | 14.0 oil<br>50.0 groats                  | 4.0 oil<br>28.0 groats                  |
| Pumpkin seed         | kg   | 10  | 2.5 oil<br>6.0 groats                    | 1.0 oil                                 |
| Corn                 | kg   | 100 | 1.0 oil<br>60.0 meal<br>15.0 bran or **) | 20.0 corn<br>5.0 bran or **)            |
|                      |      |     | 0.5 oil<br>72.0 meal<br>10.0 bran        | 12.0 corn<br>0.5 oil<br>6.0 bran        |

|                  |    |     |             |             |
|------------------|----|-----|-------------|-------------|
| Rape             | kg | 10  | 2.8 oil     | 1.0 oil     |
|                  |    |     | 5.0 groats  | 0.5 groats  |
| Linseed for oil  | kg | 100 | 26.0 oil    | 6.0 oil     |
|                  |    |     | 50.0 groats | 11.0 groats |
| Castor-oil grain | kg | 10  | 4.0 oil     | 1.0 oil     |
|                  |    |     | 5.0 groats  |             |
| Grape seed       | kg | 100 | 4.0 oil     | 4.3 oil     |
|                  |    |     |             | 88.0 groats |
| Wild chestnuts   | kg | 100 | 4.0 oil     | 1.5 oil     |

(A) Amount of agricultural product delivered, determined by established standards

(B) Amount of product received by producer

(C) Amount of product retained for services

\*) The amounts retained will be used to cover the processing costs of industrialization units, as well as to pay in lei the commission and commercial discount owed to consumer cooperative units according to law

\*\*) In this case, the value of services is paid in lei

11,023

CSO: 2700

## LAW ON PERMANENT FUNDS TO FINANCE UNDERDEVELOPED REGIONS, 1981-85

Belgrade SLUZBENI LIST SFRJ in Serbo-Croatian No 74, 31 Dec 80 pp 221-221

[Text] Law On Permanent Funds To Finance Faster Development Of Economically Underdeveloped Republics and Autonomous Regions, 1981-85

## Article 1

Permanent funds of the federation to finance faster development of economically underdeveloped republics and autonomous regions (to be found in the continuation of the text dealing with "resources of the fund") between 1981 and 1985 are based on the rate of 1.83 percent of the economy of Yugoslavia, as follows:

- 1) 50 percent--by combining the work and resources of organizations of united labor in consonance with their income and common interest;
- 2) 50 percent--from the (compulsory) loan extended by the principal organizations of united labor which participate in economic activity (to be found in the continuation of the text of the "organization of united labor").

The percentage cited under item 1 of the first paragraph of this article can be increased through agreement among individual republics or autonomous regions, under the condition that the percentage of the (compulsory) loan cited under item 2 of this article be reduced by an equivalent amount.

The republics and autonomous regions will establish through a separate agreement the modalities of combining the resources cited in item 1 of article 1 of this article as well as other questions related to the development and execution of basic decisions concerning faster development of economically underdeveloped republics and the autonomous region of Kosovo between 1981 and 1985, and concerning the combining of work effort and resources. This agreement must be reached at the latest by 31 June 1981.

## Article 2

The annual amount of resources of the Fund cited under Article 1 of this law is established through the application of the percentage rate of 1.83 of the public production sector of the Yugoslav economy of the year for which the resources are being calculated.

The amount of production of the public sector cited in paragraph 1 of this article is established according to official information provided by the Federal Institute for Statistics.

### Article 3

The annual amount of the resources of the Fund cited in Article 3 of this law is established for every republic and autonomous region with concurrences of the appropriate republic and regional officials of the Fund's assemblies, and on the basis of official information provided by the Federal Institute for Statistics concerning the amount of production by the public sector of each republic and autonomous region.

### Article 4

The legal method of securing these resources is determined by the republics and autonomous regions.

### Article 5

If no independent agreements concerning joining work and resources have been reached during the year in a manner established by the Agreement cited in paragraph 3 of Article 1 of this law, and no other deadline regarding joining of work and resources has been established between organizations of united labor and/or the republics and autonomous regions concerned, the republic or autonomous region in question is expected during the remainder of the year to pay to the Fund that part of the resources for that year which was not realized through joining of forces.

### Article 6

If an organization of united labor performs permanently an economic activity in the territories of two or more republics and/or autonomous regions, that organization is obliged to perform this activity according to rates established by the republics and/or autonomous regions on whose territory the activity or part of it is performed.

The amount of the work performed by an organization of united labor in the sense of paragraph 1 of this article is calculated as part of the contribution of the republic and/or autonomous region on whose territory the concerned united labor organization had performed the corresponding part of the economic activity.

The organization of united labor is responsible for making a separate review of the basis for calculating the amount to be contributed by every republic and/or autonomous region on whose territory it performs a permanent economic activity. If an organization of united labor performs on the territory of a republic and/or autonomous region several economic activities for which different rates of payment are prescribed, that organization is responsible for producing a separate account of the calculation basis.

With the concurrence of appropriate republic and/or regional officials, the Federal Executive Council will establish what in the sense of this article shall

be considered a permanent pursuit of economic activities, while taking into consideration the specific characteristic of individual activities.

#### Article 7

The resources of the Fund cited in item 2, paragraph 1, Article 1, of this law are the result of equivalent monthly payments by the organizations of united labor deposited before the 25th day of each month for the previous month.

The total yearly amount of resources of the Fund cited in paragraph 1 of this article is established by the final account of the organization of united labor which is deposited by 15 March of the current year for the previous year.

The resources of the Fund cited in paragraph 1 of this article are deposited to the account of the Fund at the Government Accounting Office.

#### Article 8

The resources of the Fund described in Article 1 of this law will be primarily earmarked for the building of economic projects in the economically underdeveloped republics and the Socialist Autonomous Region of Kosovo which secure a greater growth in employment and which contribute to the faster growth of income, in consonance with social plans of republics and/or autonomous regions.

In accordance with paragraph 2 of Article 14 of the Agreement on the foundation of the social plan of Yugoslavia, concrete programs for combining work and resources will be worked out, concerning faster development of underdeveloped republics and the Socialist Autonomous Region of Kosovo between 1981 and 1985.

#### Article 9

The organizations of united labor, which combine work and resources in consonance with regulations of this law, determine by mutual consent the conditions of this joint effort and above all take into consideration the joint income.

#### Article 10

The level of the annual advance payment of the resources of the Fund is established by the Fund's Assembly for each republic and/or autonomous region by applying the rate of 1.83 percent to the planned total amount of the public production of that republic and/or autonomous region during the year for which the advance payments are being determined.

The Assembly of the Fund is obliged to determine the amount of the advance payments of the Fund's permanent resources for the current year before the end of March of that year.

If in the course of the year, the amount determined by item 2, paragraph 1, Article 1 of this law, is not realized through the monthly advance payment of the Fund's resources, or through (compulsory) loan, the resources in the amount of the existing difference will be secured by the republics and/or autonomous regions.

The difference between the amount of the Fund's resources determined by item 2, paragraph 1, Article 1 of this law and the amount paid by the organizations of united labor, will be paid to the Fund by the republics and/or autonomous regions within 30 days from the day on which the level of the annual amount of the Fund's permanent resources was determined.

If a republic and/or autonomous region fails to fulfill its obligation within the deadline set by paragraph 4 of this article, the Government Accounting Office, at the request of the Federal Secretary for finances, will transfer the appropriate amount of resources from the budget of the corresponding republic and/or autonomous region to the Fund.

If the Fund's resources have been realized through the deposits by the organization of united labor and in an amount larger than the amount cited in item 2, paragraph 1, Article 1 of this law, the surplus amount of deposited resources will be credited to the corresponding republic and/or autonomous region the next year.

If the surplus of the Fund's resources was realized through the resources of a republic and/or autonomous region, that amount will be returned to the republic and/or autonomous region on request.

#### Article 11

In accordance with a republic's and/or autonomous region's responsibility set by Article 3 of this law, the Fund will make the final calculation of their obligations in the following manner:

- 1) If the amount of the annual obligation as per article 3 is larger than the advance payments as per Article 10 of this law and the resources united according to item 1, paragraph 1, Article 1 of this law, the republics and/or autonomous regions are expected to deposit the difference in favor of the Fund;
- 2) If the advance payment according to Article 10 and of combined resources under item 1, paragraph 1, Article 1 of this law exceed the annual obligation according to Article 3, the amount of the obligation of the republic and/or autonomous region will be reduced by the excess amount at the time setting of advance payments for the current year.

If the republic and/or autonomous region does not fulfill the obligation within the deadline set by paragraph 1 of this article, the Government Accounting Office will be requested by the Federal Secretary for Finances to transfer to the Fund the appropriate amounts from the budgets of corresponding republics and/or autonomous regions.

#### Article 12

The depositors will be issued bond certificates in the annual amount of the Fund's resources to be obtained through (compulsory) loans. The (compulsory) loan is repaid in 13 equal annual installments to including the interest rate of 5 percent per year.

The repayment of the (compulsory) loan will begin at the end of 3 years following the day ending the year for which the loan was made.

The interest rate for the period from the day of the loan to the day when the repayment of the (compulsory) loan begins is added to the amount of the (compulsory) loan, so that the two together represent the basis for determining the annual rate of the loan repayment.

#### Article 13

The federation guarantees the repayment of the (compulsory) loan in the manner described in Article 12 of this law.

If the Fund fails to fulfill the obligation described in Article 12 of this law, the Government Accounting Office will, on instructions from the Federal Secretary for Finances, transfer to the party in possession of the bond certificates, the appropriate amount of resources from the resources of the Fund.

#### Article 14

The Fund is responsible for investing the resources obtained through (compulsory) loans on the territories of economically underdeveloped republics and the Socialist Autonomous Region of Kosovo. The average due date of repayment for the republics would be 12 years at the interest rate of 5.5 percent per year. For the Socialist Autonomous Region of Kosovo, the average due date of repayment would be 15 years at the interest rate of 4.5 percent per year.

The repayment of the loan described in the first paragraph of this article begins 3 years after the expiration of the year in which the loan was made.

The interest calculated for the period between the day on which the loan was granted and the day on which the repayment begins is added to the amount of the loan and together with it provides the basis for calculation of the annual loan repayment rate. The republic and/or autonomous region in which the loan has been invested guarantees to the Fund that the loan will be repaid in consonance with terms agreed upon.

If the loan cited in paragraph 4 of this article is not repaid in consonance with terms agreed upon, the Government Accounting Office will, on instructions from the Federal Secretariat for Finances, transfer to the Fund a corresponding amount of resources from the budget of the economically underdeveloped republics and/or the Socialist Autonomous Region of Kosovo.

#### Article 15

The business of the collection of the Fund's resources obtained through (compulsory) loans is done by the Government Accounting Office.

The business of issuing bonds certificates and back payments of loans is done by the National Bank of Yugoslavia.

The cost of performing the transactions described in paragraphs 1 and 2 of this article is established by an agreement between the Fund and the Government Accounting Office and/or National Bank of Yugoslavia.

#### Article 16

The detailed regulations concerning the issue and amortization of the bonds certificates of the (compulsory) loan and the method of filing of the Fund's resources cited in item 2, paragraph 1, Article 1 of this law, are the responsibility of the Federal Secretary for Finances.

#### Article 17

The resources for bridging the gaps coming into existence because of different conditions under which loans have been approved and the investment of the Fund's resources, will be secured in consonance with Article 17 of the Agreement on the Fundamentals of the Yugoslav Society dealing with the measures for faster development of economically underdeveloped republics and the Socialist Autonomous Region of Kosovo between 1981 and 1985.

Excepted from the regulations per paragraph 1 of this article are the resources which by the decision of that paragraph mature in 1981. These will be provided for in the federation's budget for 1981.

#### Article 18

This law goes into force on the next day following its publication in the Official Gazette of SFRY and it will be applied as of 1 January 1981.

7045

CSO: 2800

**LAW ON SUPPLEMENTAL FUNDS FOR REPUBLICS, PROVINCES, 1981-85**

Belgrade **SLUŽBENI LIST SFRJ** in Serbo-Croatian No 74, 31 Dec 80 pp 2221-2222

[Text] Law Concerning Supplementary Resources for the Use of Republics and Autonomous Regions from 1981 to 1985

**Article 1**

The budget of the federation secures the supplementary resources for the republic and autonomous region which is unable to finance social and other public services from its own funds.

**Article 2**

Those republics and the autonomous region which have been designated by federal law to be economically underdeveloped or economically especially underdeveloped between 1981 and 1985 have the right to receive the supplementary resources from 1981 to 1985.

**Article 3**

The supplementary resources cited in Article 1 of this law are determined as follows:

- 1) in 1981--in the amount of 0.85 percent of the public production of the entire economy of Yugoslavia;
- 2) in 1982--in the amount of 0.82 percent of the public production of the entire economy of Yugoslavia;
- 3) in 1983--in the amount of 0.79 percent of the public production of the entire economy of Yugoslavia;
- 4) in 1984--in the amount of 0.76 percent of the public production of the entire economy of Yugoslavia.

**Article 4**

The annual amount of supplementary resources in the budget of the federation as cited in Article 3 of this law is determined every year on the basis of the

estimated amount of the public production of the entire economy of Yugoslavia for that year.

At the end of the year for which a federation budget has been approved, a final calculation of resources cited in paragraph 1 of this law will be made on the basis of official information regarding public production of the entire Yugoslav economy, as provided by the Federal Institute for Statistics.

#### Article 5

When the total amount of supplementary resources cited in Article 3 of this law has been determined, an amount equivalent to 0.135 percent of the public production of the entire economy of Yugoslavia is next set aside for the Socialist Autonomous Region of Kosovo as special supplementary resources aimed at the development of a financial basis for public services in that autonomous region. Then, an amount equivalent to 0.03 percent of the public production of the entire Yugoslav economy is set aside for the Socialist Republic of Montenegro as special supplementary resources because of the small number of inhabitants and a low population density in that republic.

Following the setting aside of special supplementary resources cited in paragraph 1 of this article, the share of individual economically underdeveloped republics and the Socialist Autonomous Region of Kosovo is determined on the basis of the following percentages:

|  |        |
|--|--------|
| 1) Socialist Republic Bosnia and Herzegovina | 40.15% |
| 2) Socialist Republic of Macedonia           | 18.30% |
| 3) Socialist Republic Montenegro             | 10.30% |
| 4) Socialist Autonomous Region Kosovo        | 31.25% |

The distribution of the supplementary resources per Article 3 of this law, added to the special supplementary resources set aside earlier for the Socialist Republic of Montenegro and the Socialist Autonomous Region of Kosovo, would show the following percentages:

|   |        |
|---|--------|
| Total                                     | 100.0% |
| Socialist Republic Bosnia and Herzegovina | 31.7%  |
| Socialist Republic Macedonia              | 14.5%  |
| Socialist Republic Montenegro             | 12.0%  |
| Socialist Autonomous Region Kosovo        | 41.8%  |

#### Article 6

In accordance with Article 20 of the Agreement on the Fundamentals of the Yugoslav Society dealing with the measures for faster development of economically underdeveloped republics and the Autonomous Region of Kosovo between 1981 and 1985, the federation budget will secure the resources the Autonomous Region of

Kosovo will need to cover the difference which came into existence through the reduction of the specially set aside resources per Article 3 of this law for the years 1982 to 1985. This will be regulated by a separate agreement on the measures for fastest development of the Socialist Autonomous Region of Kosovo from 1981 to 1985.

#### Article 7

To encourage faster development of the financial base of public and other services in the Socialist Autonomous Region of Kosovo, 80 percent of its contribution to the federation's budget will be waived between 1981 and 1985.

The resources waived under paragraph 1 of this article will be secured by the republics and the Socialist Autonomous Region of Vojvodina.

#### Article 8

Economically underdeveloped republics and the Socialist Autonomous Region of Kosovo will use the supplementary resources cited in Article 5 of this law for financing the basic public and other services and thus help realize their constitutionally established functions.

The economically underdeveloped republics and the Socialist Autonomous Region of Kosovo will determine in their own social plans the details concerning the use of supplementary resources cited in Article 5 of this law.

#### Article 9

If the federal law regulating the finances of the federation arrives at different decisions with respect to relations regulated in Article 4 of this law, then Article 4 of this law will have to yield to these decisions.

#### Article 10

This law goes into effect on the day following the day of its publication in the Official Gazette of SFRY, and will be applied from 1 January 1981.

7045

CSO: 2800

## FIRST JOINT PROGRAM FOR RAILROADS, ECONOMIC UNITS

Ljubljana DELO in Slovenian 27 Jan 81 p 6

[Article by Igor Prasern]

[Text] Ljubljana 26 Jan -- At the end of 1979, the board of the self-managed interest adopted a broad-based action program of measures, by which it is supposed to increase the effectiveness of its operations and lower railroad transport expenditures. This program, which was prepared for the 1981-85 medium-term period, was also adopted both by the railroad workers, and the users of railroad services, meaning the Slovenian economic organizations.

Slavko Zalokar, Chairman of the SIS [Self-Managed Interest Community] for Railroad and Port Transport of Slovenia, emphasized in a discussion that for the first time, we have a joint program of the railroads and the economy, which means that joint assignments and mutual responsibility will be involved. We have been talking about the advantages of railroad transport for a long time, and about the fact that it is considerably cheaper to transport freight by rail because in Slovenia we send about 80 percent of our rail freight on trains with modern electric traction, which in other words means that we use considerably less imported energy (petroleum) on the railroads than with highway transport. Therefore, from the standpoint of economic efficiency, railroad transport is three to five times cheaper than highway transport.

High transport costs will nevertheless begin to "squeeze" the economic organizations more and more, so they will be forced to search for new solutions to cut transport costs. In the face of more critical conditions for economic activities, even on the domestic market all goods will no longer be selling rapidly. The reduced buying power will begin to greatly limit demand everywhere and probably unsold products will begin to accumulate in the storage facilities of one another factory. Therefore, the economic organizations also have considerable "hidden reserves" in the lowering of transport expenses.

And of course, the rapidity and extent to which we will realize the action program during the 1981-85 period and the form of modern transportation that will be of greatest interest to the economy depend most of all on the actual agreements between the railroads and the economic organizations, in which both partners must find all of their business interests and also their mutual advantages. In this respect, the railroads offer a variety of forms--from the use of pallets,

modern cars, industrial sidings, and containers to so-called "limited" trains, overnight expresses, piggy-back transport of trucks, etc. Such an orientation toward modern forms of transportation are also being implemented more and more in other republics emphasizes Slavko Zalokar, although not to the same degree as far as in Slovenia. Nevertheless, modern and efficient forms of transportation on railroad systems will penetrate into the Yugoslav area also, commensurate with the degree to which the economy recognizes the indisputable advantages of railway transport.

In a conversation with the chairman of the business committee of the ZG Ljubljana [Železniško gospodarstvo Ljubljana—Ljubljana Railway System], engineer Joze Slokar, we learned that the realization of the action program for the railways will not be such an easy task. Of course, there is no wavering within the ranks of the railroad workers in the face of the difficult tasks of the future. First of all, they will try to increase the scope of their work as much as possible, not only within the bounds of Slovenia, but also in the broad Yugoslav arena. Thus, they have already established contacts with the railroad workers of Bosnia-Herzegovina to increase the transport of freight on overnight expresses that also use pallets. Similar agreements have already been established with Vojvodina and Croatia to transport grain; they are also negotiating with Rijeka railroad workers to more efficiently transport timber, livestock, and some other types of goods. All of these actions, which, of course, are only a beginning of broad-scale activity, are supposed to increase the rail freight transport to the greatest extent possible and to provide the greatest benefit possible both to individual railroad organizations and to the economy. Of course, it will be necessary in Yugoslavia to hasten the efforts of many years standing toward replacing the long-outdated fare systems as soon as possible with modern forms of business operations, which ought to develop within proper income relationships.

In Joze Slokar's opinion, it will be most difficult, especially this year, and especially during the first months of this year, when money will be a little "tight," because last year, the railroads as a rule obtained less compensation for simple reproduction, as would normally be needed (about 500 million less). Therefore, this year it is not possible to count on greater investments to modernize the railroads, rather it will be necessary to maintain what the railroads have as carefully as possible. In the future, modernization is also supposed to be expanded more and more. Of course, this is dependent to a great degree on recognition within associated labor that only a modern railroad system can become a real backbone for the transportation system.

The action program of the railways is quite concrete, and offers a varied array of the most varied modern forms in transport, in which case, both the railways and the economy, which uses the railroad transport services, will search steadily and earnestly for a common subject. Because of a disorderly and almost uncontrollable transportation situation in our country, we are caught up in a situation where our transport costs [per item] of finished goods is almost 20 percent, whereas this percentage is only 3 to 7 percent in highly developed countries.

Program of Modernization of Slovenian Railways

|  | 1980      | 1985      |
|--|-----------|-----------|
| Number of Pallets                              | 1,600,000 | 3,100,000 |
| Number of Containers Transported               | 28,200    | 71,000    |
| Goods Carried via Overnight Express            | 96,000t   | 290,000t  |
| Cement Transported                             | 400,000t  | 900,000t  |
| Industrial Sidings                             | 340km     | 498km     |
| Number of Freight Cars in Operations Transport | 2,800     | 7,500     |

9625

CSO: 2800

## DAILY NEWSPAPER CIRCULATION COMPARED FOR 1979, 1980

Belgrade NASA STAMPA in Serbo-Croatian No 299, Feb 81 p 15

[Text] Comparative Survey of the Average Number of Printed and Sold Copies of Daily Newspapers, 1979 and 1980

| Title of paper                           | Copies printed |         |       | Copies sold |         |       |
|--|----------------|---------|-------|-------------|---------|-------|
|  | 1979           | 1980    | Index | 1979        | 1980    | Index |
| Socialist Republic of Bosnia-Herzegovina |                |         |       |             |         |       |
| OSLOBODENJE                              | 83,218         | 84,968  | 102   | 70,189      | 71,130  | 101   |
| SARAJEVSKE NOVINE                        | 18,402         | 19,360  | 105   | 14,735      | 15,518  | 105   |
| SR [Socialist Republic] of Montenegro    |                |         |       |             |         |       |
| POBJEDA                                  | 19,127         | 21,792  | 114   | 16,963      | 19,316  | 114   |
| SR of Croatia                            |                |         |       |             |         |       |
| VJESNIK                                  | 88,819         | 92,460  | 104   | 70,238      | 75,547  | 108   |
| VEČERNJI LIST                            | 277,258        | 289,863 | 105   | 244,617     | 258,189 | 106   |
| SPORTSKE NOVOSTI                         | 164,610        | 156,792 | 95    | 130,818     | 123,541 | 94    |
| SLOBODNA DALMACIJA                       | 67,803         | 70,948  | 105   | 59,877      | 62,425  | 104   |
| N. LIST and GLAS ISTRE                   | 64,720         | 69,502  | 107   | 57,263      | 60,448  | 106   |
| GLAS SLAVONIJE                           | 14,238         | 15,589  | 109   | 12,119      | 13,329  | 110   |
| LA VOCE DEL POPOLO                       | 3,600          | 4,244   | 116   | 2,624       | 3,124   | 119   |
| SR of Macedonia                          |                |         |       |             |         |       |
| NOVA MAKEDONIJA                          | 34,559         | 31,389  | 91    | 28,803      | 25,823  | 90    |
| VEČER                                    | 30,879         | 31,356  | 102   | 26,424      | 26,581  | 101   |

[Continued on following page]

| <u>Title of paper</u>  | <u>Copies printed</u> |             |              | <u>Copies sold</u> |             |              |
|--|-----------------------|-------------|--------------|--------------------|-------------|--------------|
|  | <u>1979</u>           | <u>1980</u> | <u>Index</u> | <u>1979</u>        | <u>1980</u> | <u>Index</u> |
| <b>SR of Slovenia</b>  |                       |             |              |                    |             |              |
| DELO   | 97,993                | 103,120     | 105          | 92,724             | 97,140      | 105          |
| DNEVNIK--Ljubljanski   | 57,582                | 55,514      | 96           | 54,859             | 52,960      | 97           |
| VEČER--Maribor   | 58,414                | 59,852      | 102          | 55,021             | 56,129      | 102          |
| <b>SR of Serbia<br/>(proper)</b>                                 |                       |             |              |                    |             |              |
| BORBA  | 49,111                | 54,900      | 112          | 36,829             | 37,627      | 102          |
| VEČERJE NOVOSTI  | 364,841               | 365,199     | 100          | 322,884            | 316,288     | 98           |
| SPORT  | 120,479               | 121,505     | 101          | 97,709             | 94,002      | 96           |
| POLITIKA   | 289,163               | 292,678     | 101          | 252,234            | 255,726     | 101          |
| EKSPRES  | 270,520               | 261,113     | 96           | 238,681            | 227,069     | 95           |
| PRIVREDNI PREGLED  | 14,596                | 15,794      | 108          | 14,596             | 15,794      | 108          |
| <b>SAP (Socialist<br/>Autonomous<br/>Province) of<br/>Kosovo</b> |                       |             |              |                    |             |              |
| RILINDIJA  | 33,887                | 37,481      | 111          | 31,006             | 33,580      | 108          |
| JEDINSTVO  | 8,666                 | 10,244      | 118          | 7,357              | 8,172       | 111          |
| <b>SAP of Vojvodina</b>  |                       |             |              |                    |             |              |
| DNEVNIK  | 30,060                | 31,660      | 105          | 25,272             | 26,034      | 103          |
| MAGYAR SZO   | 31,609                | 31,386      | 99           | 27,681             | 27,034      | 98           |
| SFRY--Total  | 2,294,223             | 2,328,709   | 102          | 1,991,593          | 2,002,526   | 101          |

CSO: 2800

END

**END OF  
FICHE  
DATE FILMED**

4/15/81

---